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Frank Adam

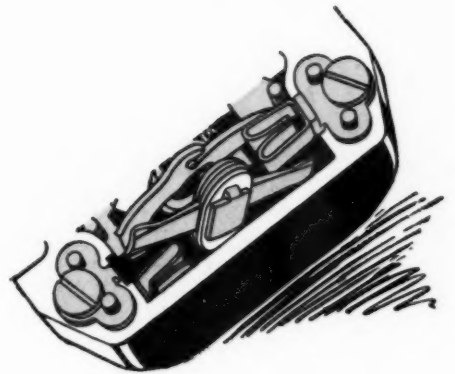
ELECTRIC COMPANY

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... And now HUBBELL
overcomes
 the most frequent cause of
Switch failure ..



Burning of contacts at "make" eliminated . . even when in circuit with type "C" lamps

With a new switch, incorporating a radically different form of contact spring, Hubbell has banished the most frequent cause of switch failure.

Burning of switch contacts at the "make", especially severe when a switch is in circuit with type "C" lamps, is eliminated in the new line of Hubbell Shallow Flush Toggle Switches. Hubbell engineers have designed a contact spring which provides for the enormous inrush of current . . a spring which will not burn and pit even when controlling type "C" lamps.



This new switch has been subjected to the severest tests, and more than meets our own strict requirements as well as Underwriters standards.

Many features, other than the new contact spring, are worthy of your investigation. Some are briefly noted here . . take a minute to study them. Then have our nearest office supply detailed information. Get details also on Hubbell Screwless Plates . . They save time in installation and insure an attractive job.

Electrically and Mechanically Perfect

A radically new form of contact spring scientifically designed so that two different rates of vibration are set-up in the spring; one tending to counteract the other. Thus recoil is practically eliminated in the ends of the contact spring when the solid metal contact blade strikes between them. As a result, burning and pitting of the spring is prevented—even when in circuit with type "C" lamps.

Automatic "kick off" prevents sticking of blades in contact.

A perfectly insulated commutator support.

Commutator blades rigidly riveted to carrier, insuring positive alinement.

Spring arm is pivoted on a round shaft, seated in a symmetrical bearing, facilitating faster, smoother action without wear.

Mechanism separate from bridge—perfectly insulated.

A solid bridge with ears lies in a recess across Bakelite cover—entirely insulated; perfect alinement and rigidity insured.

Each wiring terminal is securely held by two screws.

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A complete line to meet any need—

- No. 9801 Single pole, 5 amperes, 250 volts; 10 amperes, 125 volts
- No. 9802 Double pole, 10 amperes, 250 volts
- No. 9803 Three-way, 5 amperes, 250 volts; 10 amperes, 125 volts
- No. 9804 Four-way, 2 amperes, 250 volts; 5 amperes, 125 volts
- No. 9805 Single pole, 20 amperes, 250 volts
- No. 9806 Double pole, 20 amperes, 250 volts

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HUBBELL
Toggle Switches

Please send information on Hubbell Toggle Switches

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E.C. 8-29

Electrical Contracting

With Which Is Incorporated The Electragist

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Vol. 28

AUGUST, 1929

No. 10

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RESALE PRICE NEWS

Forty per cent of the users of the Resale Price Service have found it effective in settling disputes over bills. Customers see some very low prices in the 5 and 10 cent store, or the hardware store, and knowing nothing about quality, they jump to the conclusion that the contractor is robbing them. There is no argument, however, when Electrical Contracting's Resale Prices are shown. The public always recognizes the fairness of a nationally published price. In one case, recently, a bill of around \$500.00 that had been in dispute for some time was immediately settled upon the basis of Electrical Contracting's Resale Prices.

There have been a number of small price revisions during the past month.

Cut-out boxes are higher in the small sizes, and lower in the larger sizes.

Conduit is lower in the large sizes.

Slight downward revisions have taken place in elbows, couplings and bends.

Armored lead covered cable and armored lamp cord are down.

Non-metallic sheathed cable is down slightly in the larger sizes.

There have been a number of revisions in the Resale Prices of friction and rubber tape.

Prices on Radio Outlets have been added. See PL-18.

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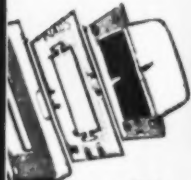
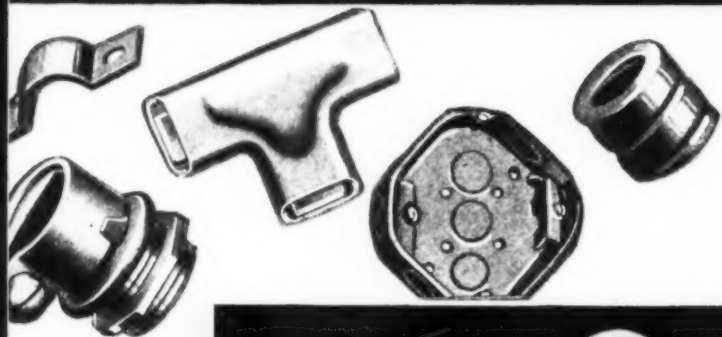
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- (e) FLEXIBLE STEEL TUBING FOR GASOLINE HOSE LINDING HEAVY CONSTRUCTION TIGHTLY JOINED

3 STEEL ARMORED CABLE

- (a) NATIONAL FLEXISTEEL & C. DOUBLE ARMORED CABLE WITH KRAFT ARMOR AND RUBBER INSULATION
- (b) FLEXISTEEL ONE TO FOUR CONDUCTORS PROTECTED BY DOUBLE STRAP FLEXIBLE STEEL ARMOR
- (c) UNALFLEX FLAT STEEL ARMORED CABLE FOR SURFACE AND UNDERPLASTER TWO OR THREE WIRE CIRCUITS
- (d) REINFORCED CABLE PROTECTED BY RUBBER HOUSING AND FLEXIBLE STEEL ARMOR

4 METAL MOLDING

- (a) FLAT RACEWAY FOR FOUR WIRES SEPARABLE CAP AND BASE
- (b) FLAT RACEWAY FOR TWO WIRES SEPARABLE CAP AND BASE

5 NON-METALLIC FLEXIBLE CONDUIT

- (a) FLEXURON FLEXIBLE WOVEN CONDUIT IS LIGHTWEIGHT AND FLAMEPROOF PROTECTION TO WIRING
- (b) AUTODUCT CLOTHES ROVEN FLEXIBLE CONDUIT HIGH TENSILE STRENGTH FINISH FOR AUTOMOBILE WIRING MOST FLAMEPROOF AND FLAMEPROOF

6 NON-METALLIC SHEATHED CABLE

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- (b) LOOM WIRE NON-METALLIC SHEATHED CABLE PAPER WRAPPED ENCLOSED IN HEAVY TREATED OVERALL BRAID
- (c) CARLIFE AUTOMOBILE STARTER CABLE KRAFT WRAPPED CONDUCTORS COVERED WITH HEAVY LOOM BRAID FINISHED WITH HIGH LUSTER LACQUER

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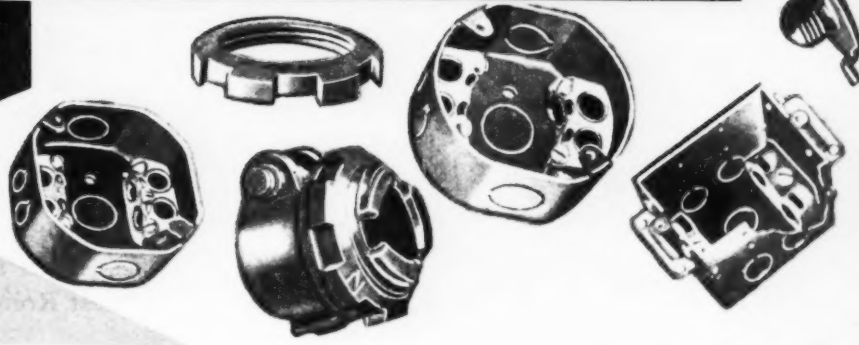
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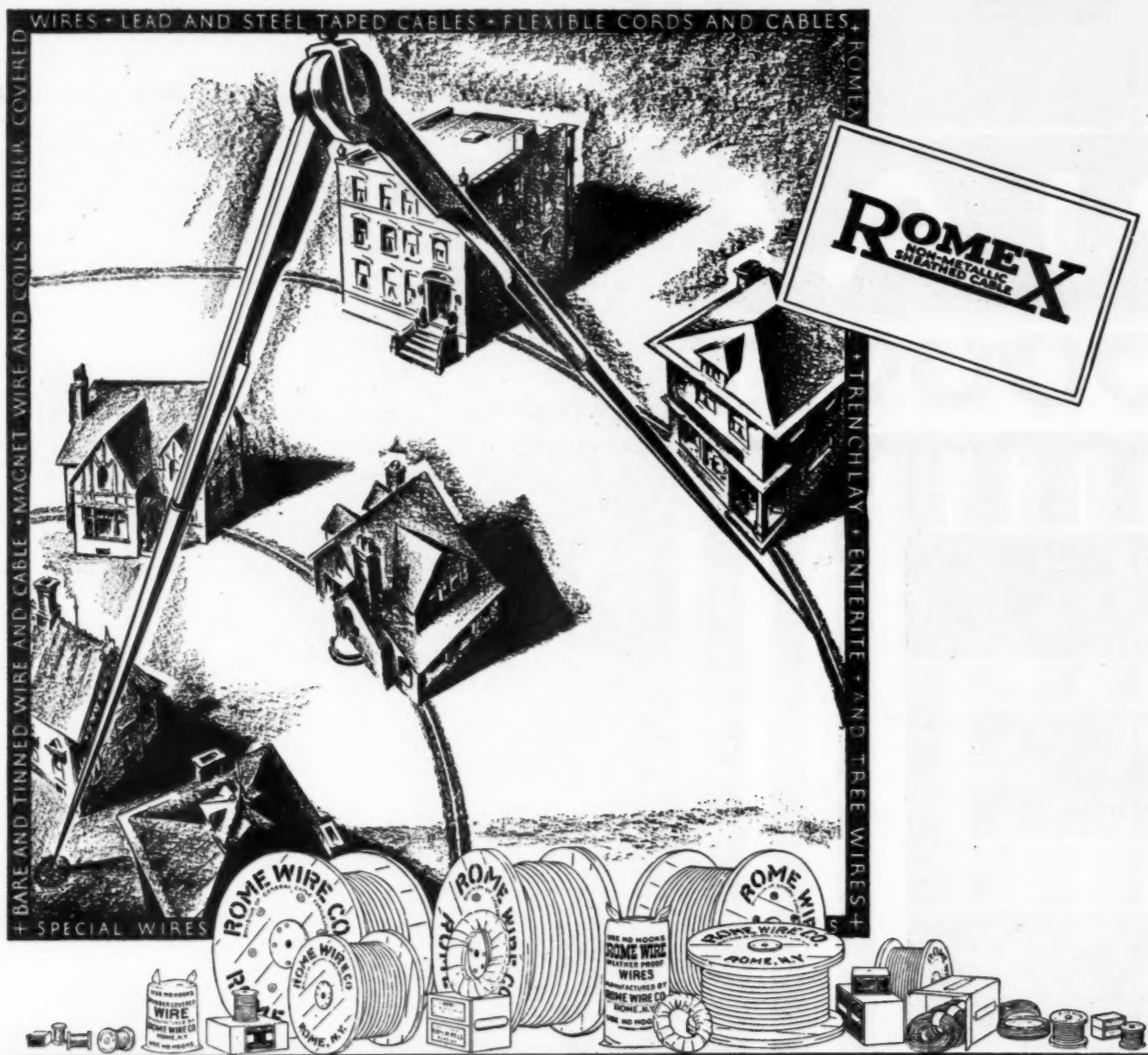
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Let us send you complete details—just ask for the latest RomeX booklet.

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ROME WIRE

2913-R

The Fable of the Mouse-Trap

SOMEONE said: "Though I live in the very heart of a forest, if I but make the finest mouse-trap, the world will make a beaten path to my door." Thus beginneth and thus endeth the fable of the mouse-trap, for truly it is a fable.

A century or more ago when word of mouth was the only advertising, the world did hunt out the producers of quality products. Today, when, as in the electrical field, even the poorest of approved products is good, the manufacturer of the better than average product cannot afford to be a shrinking violet.

In other words, manufacturers of quality products must shout their wares with a big voice—the loudest speaker gets the most attention. Attention, however, as any hawker on a street corner knows, is worthless if it is merely idle curiosity: Attention must be spurred into action.

AND that leads us to suggest to advertisers in ELECTRICAL CONTRACTING and other trade papers that they advertise as they sell—to the buyer. A salesman, if at all successful, has a different approach for different kinds of prospects—the stereo-

typed, sing-song sales patter doesn't get over. Why should it then in advertising?

Some advertisers are disinclined to disclose essential information regarding their product for fear the information might be used against them in some way by their competitors. They forget that all secret information is known to their competitors just as soon as their own salesmen know it, and sometimes before.

THE editor of ELECTRICAL CONTRACTING has to give to his readers the kind of articles they are interested in and in a way that appeals to them. He must never write anything to please himself—always to help or appeal to his readers. How much more essential is it that advertisers follow the same rule—they have the additional hurdle of sales resistance.

The advertising pages of ELECTRICAL CONTRACTING and any other trade paper can be made as valuable to the reader as the text pages. The value of the advertising to the advertiser will depend in a large measure upon how appealing he has made his advertisement to the reader.



— you can bank on Durabilt wiring materials. They offer you quality plus speed—a combination that insures the best wiring job in the shortest possible time. Get acquainted with the complete Durabilt line. You'll find it highly profitable.

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|--|
| DURAWIRE <small>REG. U.S. PAT. OFF.</small> Rubber-Covered Wire and Flexible Cords |
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Order Durabilt Products by Name
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ANACONDA WIRE & CABLE COMPANY

General Offices, 25 Broadway, NEW YORK

Chicago Office, 111 West Washington St.

Joining

by John Wise

The Successful Contractor

THEY say that we Americans are the greatest joiners in the world. I guess we are. But I've come to the conclusion that we do a lot of our joining like the folks in the advertisements choose cigarettes—blindfold.

It's strange that the man who is quickest to join a pinochle club is generally the slowest when it comes to joining his trade association. Why this is so nobody knows. I asked Henry Trimmer about it the other day.

"Henry," I says, "why ain't you in the Electragists?"

"Can't afford to give it the time," sezze.

"Horsefeathers!" sezzi, "why I've seen you in the back room o' Smokey Joe's place spending hours on end just peeking at five pieces of pasteboard in hope of seeing a royal flush."

"O, well, they's something to that, maybe, but still I can't see no profit in these here leagues and associations and things like that."

"Henry, lissen," says I—and I started in on him. I won't try to repeat all I said but I wound up by quoting what David Lawrence said—smart man, David Lawrence is:

"The most significant movement of our times is the trade association movement. The progress of this country is directly related to the trade organizations, and the units that have been built up in business for the exchange of ideas. Trade associations have become the greatest influence in the elimination of waste, in bringing about better understanding of industry among competitors within industry."

"Yeah," says Henry, "but that there is highbrow stuff. Just tell me one actual case where you got a cash money profit out of bein' a member o' the Association."

"Henry, if I did that you'd be sore as a hammered thumb," I sez.

"Why?" sezze.

"Because I took a sweet job away from you



at considerable more than you bid. It was that American Castings job—remember? After th' bids were open th' general manager called me in an' he says, 'Mr. Wise, I'd like to give you this job but you're about eight per cent higher than Henry Trimmer, and everybody knows that Trimmer is a good man. How do you explain that?' Well, Henry, all I did was to point to the line on my letterhead that reads, 'Member of Electragists International,' and I said, 'I'm a member and Henry isn't. That membership means eight per cent **to you** as well as to me. Make your own inquiries.'"

"That was a lot o' hooley," said Henry, and he sure was sore.

"You think so?" sezzi. "Well, I'm telling you something: The American Castings man took the trouble to **find out** what the Association means, and you never took that much trouble, for if **you knew what your association means to you** you'd belong."



The interior of the truck, which has 36 small bins on each side, and wire spools turning on axles up in front. This stock contains everything necessary for any repair or small installation that is not special in nature. The supply is kept up daily.

Repairs Has Specially

If there is a class of work at which a contractor excels, if he has special equipment or if he has made extra effort to specialize and develop a certain kind of service, that particular business naturally gravitates to him. This is the case with the Robbins Electric Co., Moline, Ill., one of whose specialties is speedy and efficient action on service calls, maintenance and breakdown repairs, made possible by the service truck here shown and described



Mr. Robbins states emphatically that a special service truck will never operate over 50 per cent efficient unless it is put in the hands of a trained man with no other work to bother him. Harry Frieden, who operates the truck, is not only a technical man, but quite a salesman as well, suggesting extra fuses, lamps, etc., selling them right

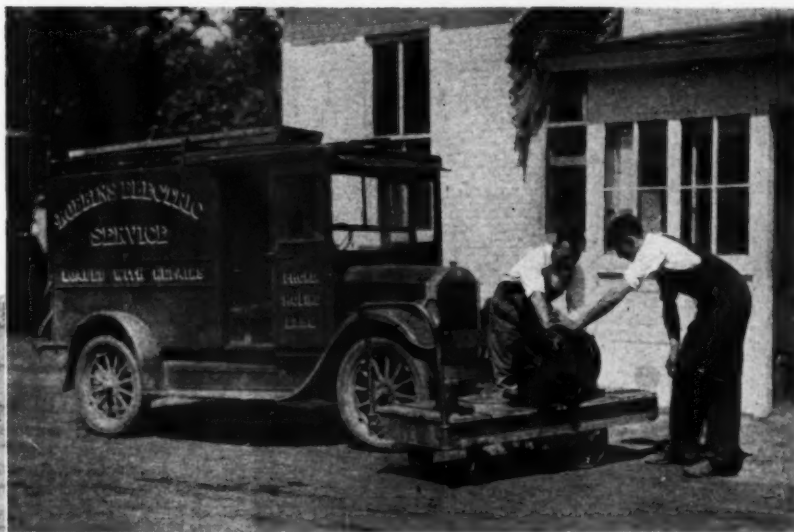
from the truck. When called to a residence for trouble-shooting, he will explain that he can install a convenience outlet cheaper by doing it then and there, and picks up many small jobs in this way. In this picture Larry Anderson, (right) superintendent, is handing Harry another service order to be done on the way back from the call he already has.

Specialist Equipped TRUCK

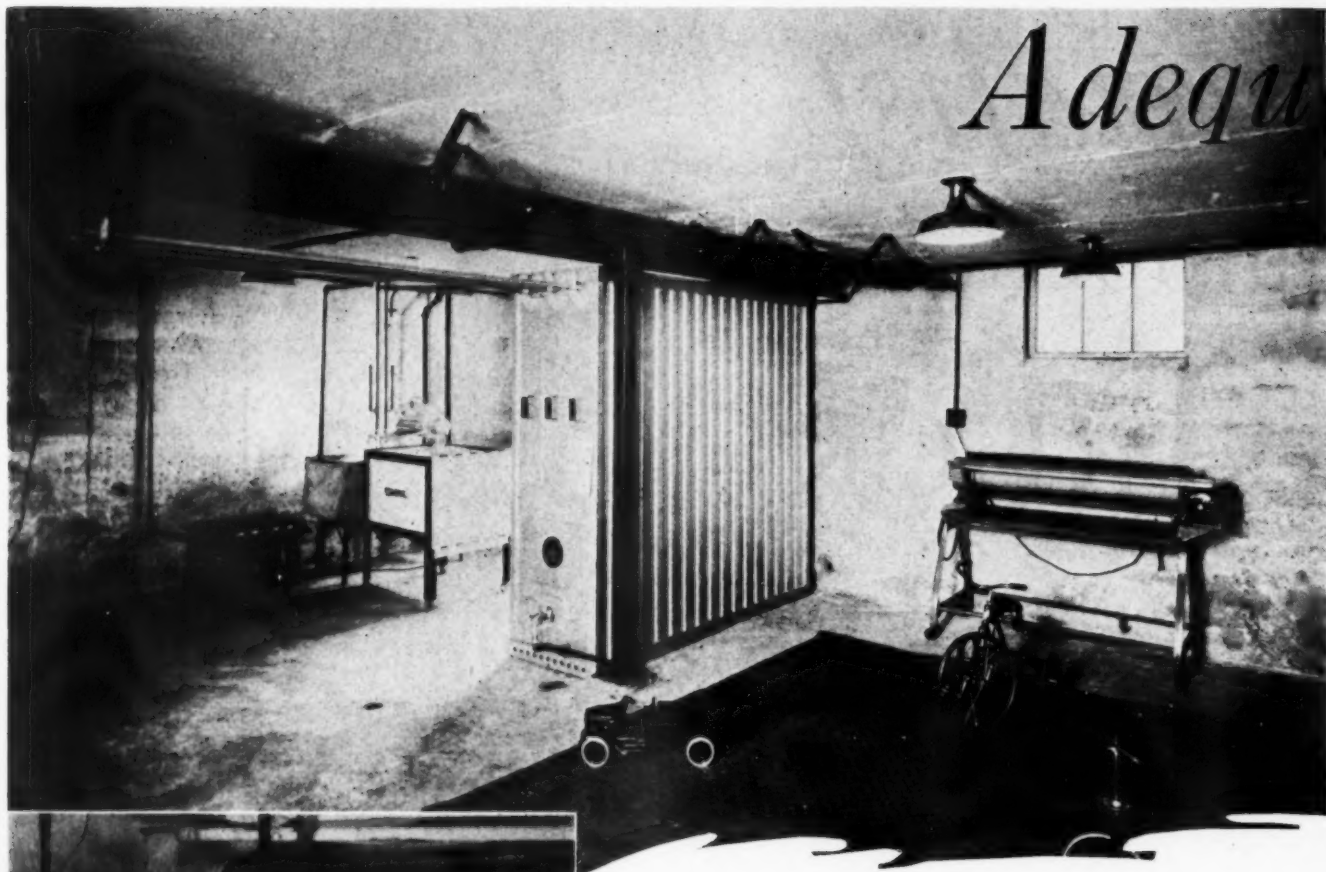


C. R. Robbins, head of the Robbins Electric Co.

Showing the "Robbins Electric Service" truck in action at one of Moline's dairy farms. Harry is going to hook up the motor seen in the foreground. His next stop is a coal mine and after that a big bakery. Most of the customers are regulars and the list doesn't change much except to add one now and then.

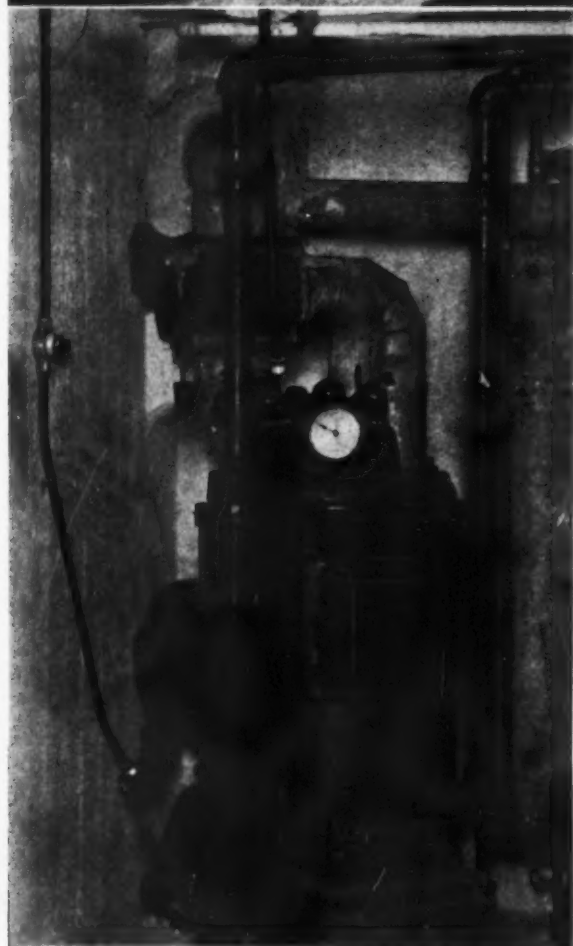


Harry has learned that he can't have too many tools and time saving devices for this special service work. Here he is girded for battle with a flock of "weapons" on his hip, and carrying his homemade tester. This consists of a small wooden box, a three-way snap switch and four 2-cp., 110-volt candelabra base lamps. By means of the switch he throws two lamps in series for 110-volt, or all four for 220-volt work.



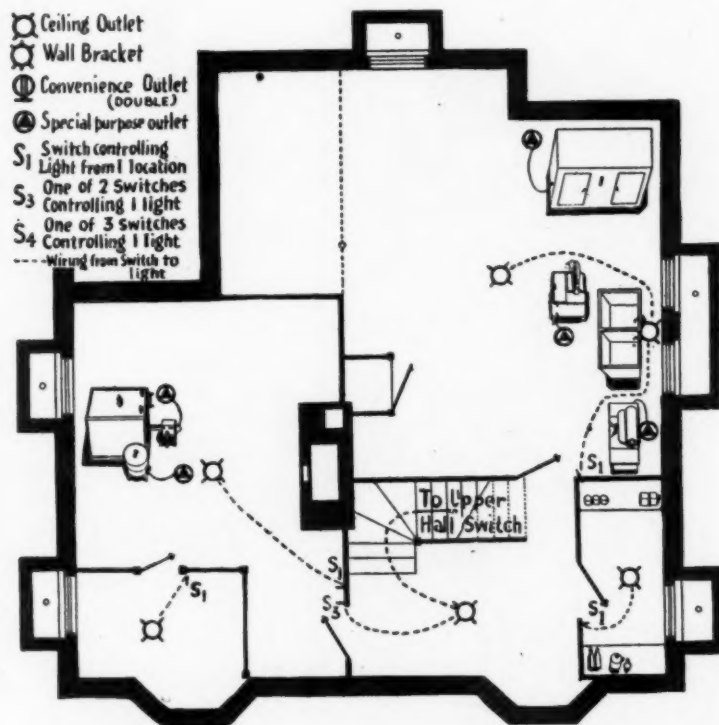
Adequately

Outlets are high up on the walls in the basement. Lighting units are of the industrial type.



The furnace provides many opportunities for the contractor, such as thermostatic regulation, air circulation blowers, oil burners, etc. Here a mechanic is wiring to a blower to permit the use of fine coal.

Diagram of a basement adequately wired.



Wiring in the BASEMENT

With the increasing use of oil and gas heaters the basement of a house offers greater possibilities of usefulness, all of which are predicated on more adequate wiring and lighting. In fact, the basement is becoming one of the most important rooms in the house so far as the electrical work is concerned

Recommended BASEMENT WIRING Features

Basement Stairway:

One light at foot of stairway, controlled by switch at top of stairs. Pilot lamp may be placed in kitchen to show whether light has been left on accidentally.

Laundry:

One ceiling light with suitable reflector for each 100 sq. ft. of floor area, on wall switches. One heavy duty convenience outlet for electric ironer. Two regular duplex convenience outlets for hand iron, washing machine and fan.

Furnace Room:

One ceiling light on wall switch. Heavy duty convenience outlet to operate oil burner motor or fan.

Billiard Room:

Two ceiling lights three feet apart centrally over billiard table, controlled by wall switch. Wall brackets to suit. One duplex convenience outlet for each 20 ft. of wall length.

Fruit, Vegetable, and Coal Rooms, Toilet, Etc.:

One wall bracket or ceiling light on wall switch.

Radio Wiring:

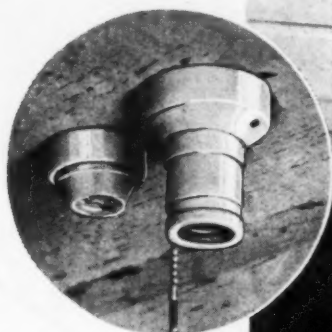
Aerial and ground wires should run up to rooms requiring this service, and terminate in telephone jack receptacle.

Safety Lighting:

A master switch can be placed in basement so connected that when a button is pressed in the master bedroom, one light in every room immediately flashes on as well as lights in front of garage, around house or in the grounds.

Open Basements:

Where basements are not partitioned, one ceiling light should be provided for every 100 ft. of area. Two duplex convenience outlets should be placed for use of fans, blowers, electric tools, etc.



There should always be a light over the wash tubs and a convenience outlet for the washer.

Credit for these recommendations and the wiring layout goes to the Electrical League of the Niagara Frontier, Buffalo, N. Y.

Effective Ways of Making and Handling

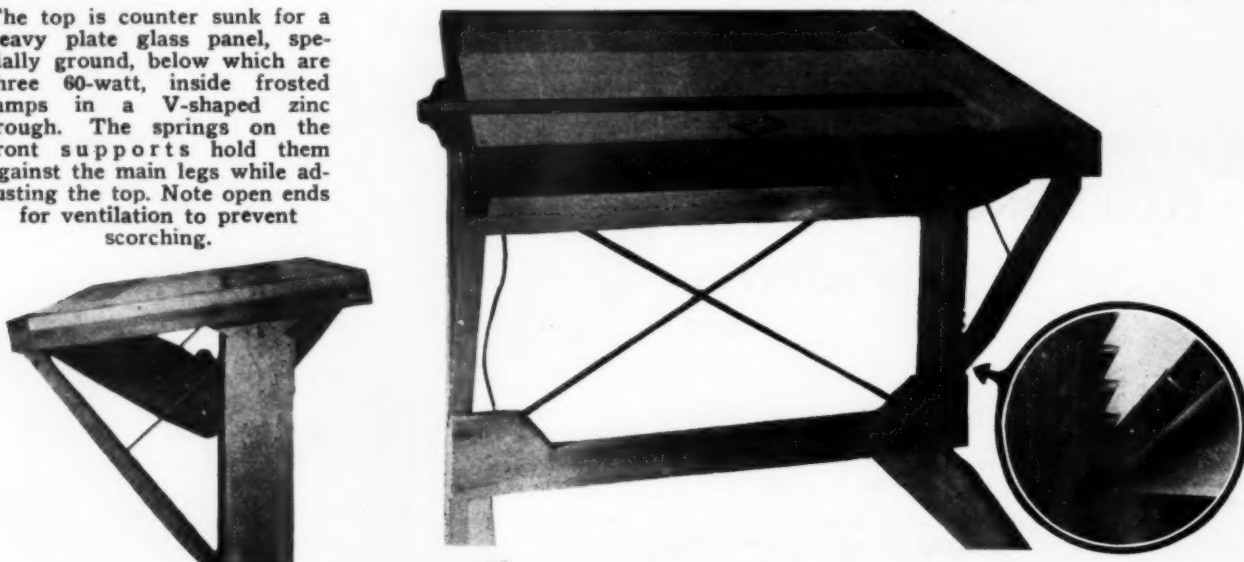
LAYOUTS

When a firm makes its own layouts for every job, it is good business and sure economy to provide all necessary tools and helpful devices for the drawing and handling of the plans.

The Davenport Electric Contract Co., Davenport, Ia., not only has a good sized room, well equipped, for this purpose, but H. M. Heysinger, president, who makes all the layouts, has perfected a number of improved methods, as well

This drafting table, developed by Mr. Heysinger, is squared on all four sides. It is rigid, yet the top can be adjusted to about 25 degrees slant. This close-up shows how the front supports fit into the notches on the uprights allowing quick adjustment.

The top is counter sunk for a heavy plate glass panel, specially ground, below which are three 60-watt, inside frosted lamps in a V-shaped zinc trough. The springs on the front supports hold them against the main legs while adjusting the top. Note open ends for ventilation to prevent scorching.



Instead of a handful of torn and faded blueprint, the layout is firmly pasted in a book made of good wallboard with 4-in. black binding. The outside of the covers is

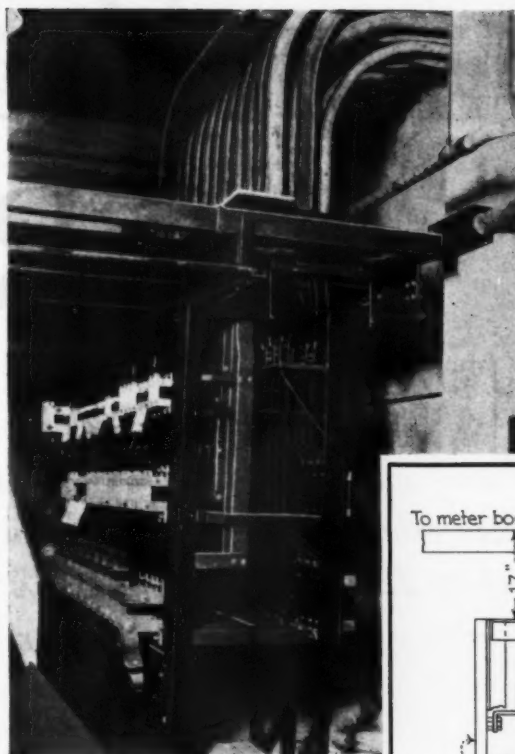
varnished; thus the whole thing is water, sun, tear and soilproof. Mr. Heysinger looks on while Leo Paulsen, foreman, shows one of his men what to do next.



A 12-compartment, dust-proof cabinet which is wide enough to accommodate the largest blueprint or drawing. The door slides easily up and down because of the sash-weight attached. Each compartment is marked with the name of a job, and contains all plans, data and auxiliary sketches.

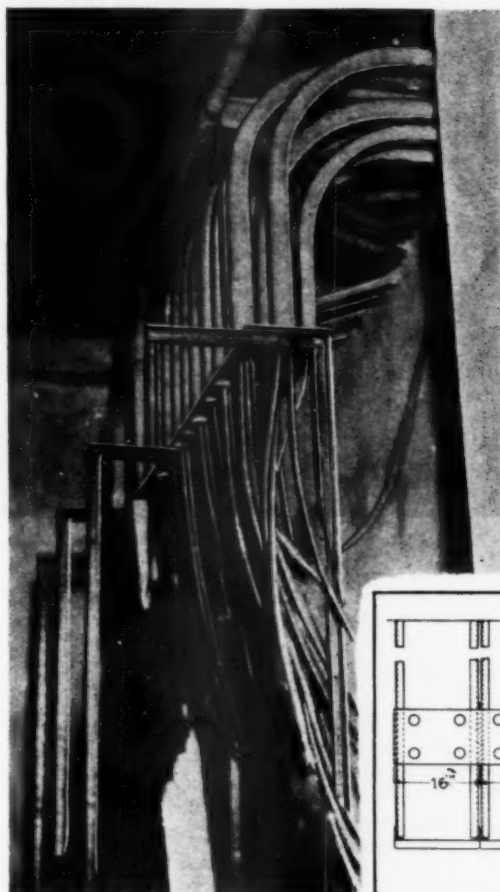
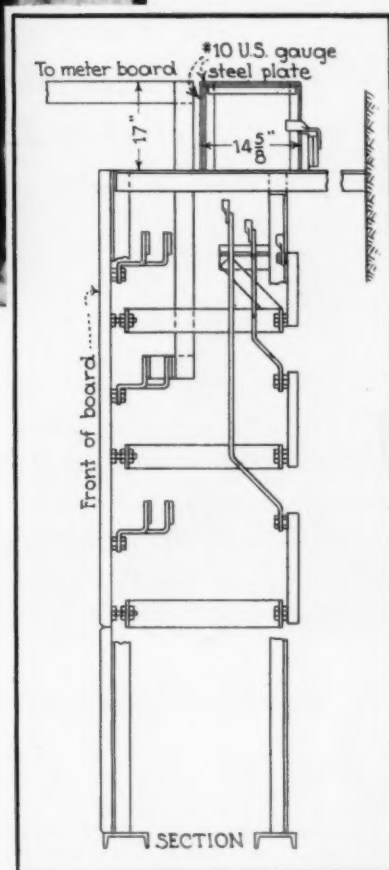
The Edwards Electric Construction Co., New York, by running conduits to switchboard directly over switch position by means of a steel plate

Eliminates Switchboard Pull Box and Saves Time and Money



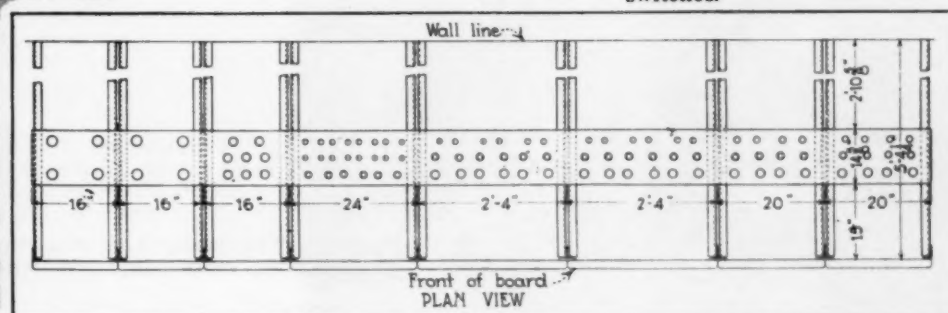
In place of pull box over this switchboard, conduits were run in directly over the switches. The feeders from the meter-board were brought in overhead by buss bars.

Cross section of switchboard, showing steel plate mounting at the top.



When conduits were in place, a steel plate with holes cut directly over switch locations, was attached by lock-nuts and bushings to the conduits, and was mounted on the angle iron supports prior to the installation of the switchboard, thereby eliminating the necessity for taping the wires.

Plan showing the layout of holes cut in the steel plate directly over the switches. This was placed over the switchboard as shown and the wires or cables were dropped directly to the switches.



Inadequacy of Room by

The Thompson Market Analysis made for the Industry Sales Conference covered, approximately, 5,000 residences, of which 22% were rented and 78% owned. The statistics on wiring inadequacy here pictured were disclosed by that survey

EXCEPT for the living room, nearly half the rooms had no convenience outlets whatsoever. The majority of homes were fairly well equipped with ceiling and side-wall lighting fixtures, but the absence of switches was marked.

← 25% — x ————— 75% →



The living room is next to the poorest wired room in the house—only 25% adequate

← 49% — x ————— 51% →

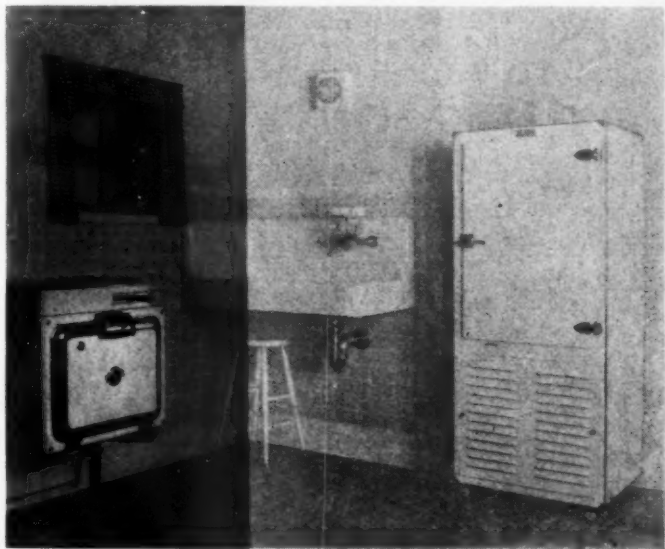


The dining room was found to be the most adequately wired—49%.

House Wiring Room

SEVENTY per cent of the women interviewed said that they were not interested in additional outlets and fixtures. Only 45 per cent had made any improvement since living in their present home and they were insufficient to bring more than 1.2 per cent of the homes up to standard.

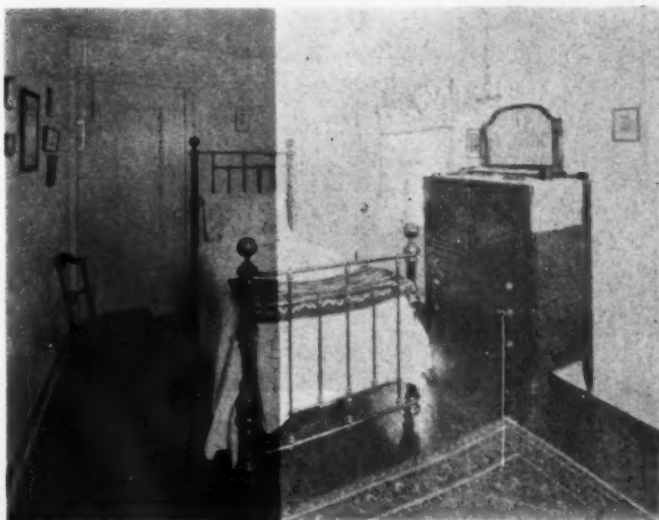
← 37% x → 63%



Kitchens showed about the same standard as bedrooms.

The bathroom is the poorest wired room in the house. If no plugs were required it would be up to 38% adequate.

← 38% x → 62%



The main bedroom wiring is little better than one-third adequate.

← 5% x → 95%



Specialist Finds Refrigerator Wiring Pays

By WILLIAM L. DORGAN

Dorgan Electric Co., South Boston, Mass.

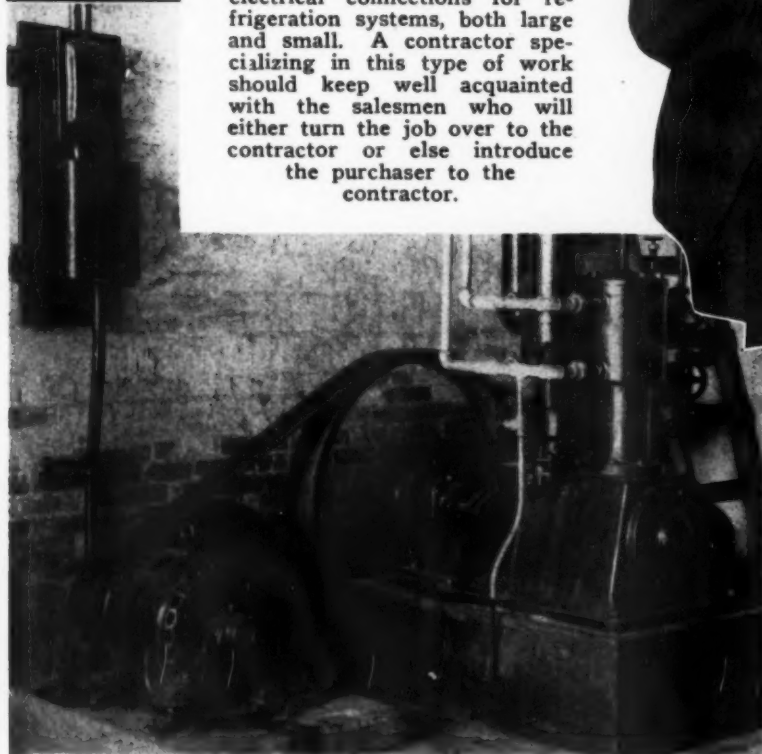
For the electrical contractor who will keep in close contact with refrigerator sales organizations, there is a steady flow of this work, and it is profitable work



Refrigeration salesmen, as a rule, like to work with an electrical contractor who is acquainted with the local ordinances and is fitted to make electrical connections for refrigeration systems, both large and small. A contractor specializing in this type of work should keep well acquainted with the salesmen who will either turn the job over to the contractor or else introduce the purchaser to the contractor.



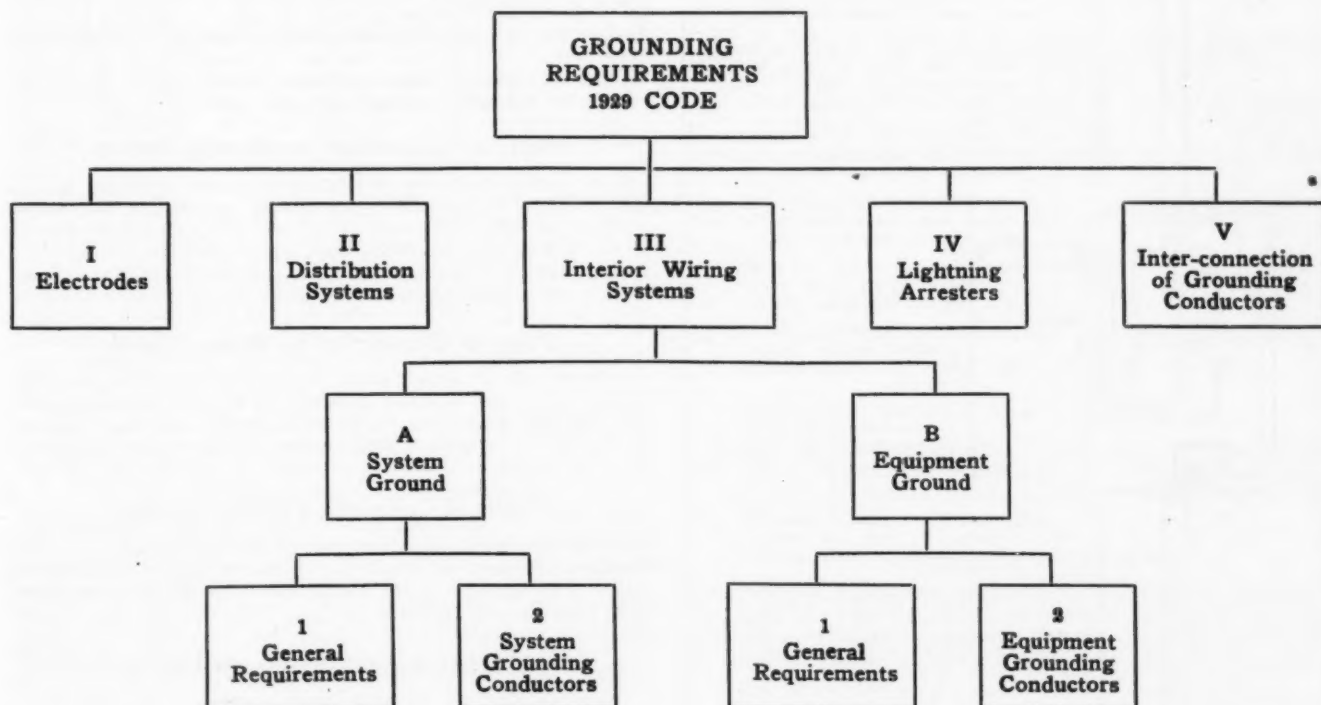
After being introduced to the purchaser, the contractor then follows up with his sales effort. When a few local names are mentioned for whom this type of work has been done, there is usually little sales resistance.



The electrical connections, while fairly simple, must, however, closely follow the local ordinances as small differences sometimes make a lot of trouble. Neatness is also essential in making a satisfied customer. Although a good portion of the work is commercial, residential installations are comparably profitable.

Guide To 1929-Grounding Rules

Outline of Grounding Requirements in new National Electrical Code about to be issued, shows exactly what rules to follow under all conditions



I. Grounding Electrodes

Type to be Used

1. Water piping, if available (901-b).
2. If water piping is not available, a system ground conductor or secondary neutral grid (901-b).
3. If neither 1 nor 2 is available, the metal frame of the building, a gas piping system, a local metallic underground piping system, metal wall casings, etc., an artificial ground (901-c).

Artificial Grounds

Shall be buried below moisture level if practicable. Shall present not less than 2 sq. ft. to the soil. Dimensions for plates, pipes and rods. Pipe or rod—one piece, driven to a depth of 8 ft. (901-d).

Pipe or rod shall have clean metal surface (908-a).

Resistance

Shall not exceed 3 ohms for water pipes or 25 ohms for an artificial ground. If as low as 25 ohms cannot be obtained with one, two shall be used (901-e).

Use of Rails

Shall not be used for grounding any system except one supplied from the railway circuit. May be used for grounding railway equipment, but not for other equipment unless no other electrode is available (908-f).

At Supply Stations

Circuits, equipment and lightning arresters shall be connected to all available continuous metallic underground piping system between which no appreciable difference of potential exists; otherwise to one such system only (908-b).

CONTRACTING

II. Distribution Systems Supplying Interior Wiring Systems

Systems to be Grounded and Methods of Grounding

D. C. 2-wire not over 300 volts—to be grounded on one conductor at supply station, but not at individual services. Grounding recommended if there is a neutral point and there is not over 300-volts from neutral to any other point. Grounding not recommended if voltage to ground would exceed 300-volts (902-a).

D. C. 3-wire—to be grounded on neutral at supply stations, but not at individual services (902-b).

A. C. secondary—to be grounded if voltage to ground will not exceed 150-volts. To be grounded at every service, except by permission the ground may be omitted at any one service. Grounding recommended if voltage to ground is over 150 but not over 300 (902-c).

System Ground Conductor

A system ground conductor or secondary neutral grid (see definitions) shall be so grounded as will satisfy requirements as to carrying capacity and resistance (901-f).

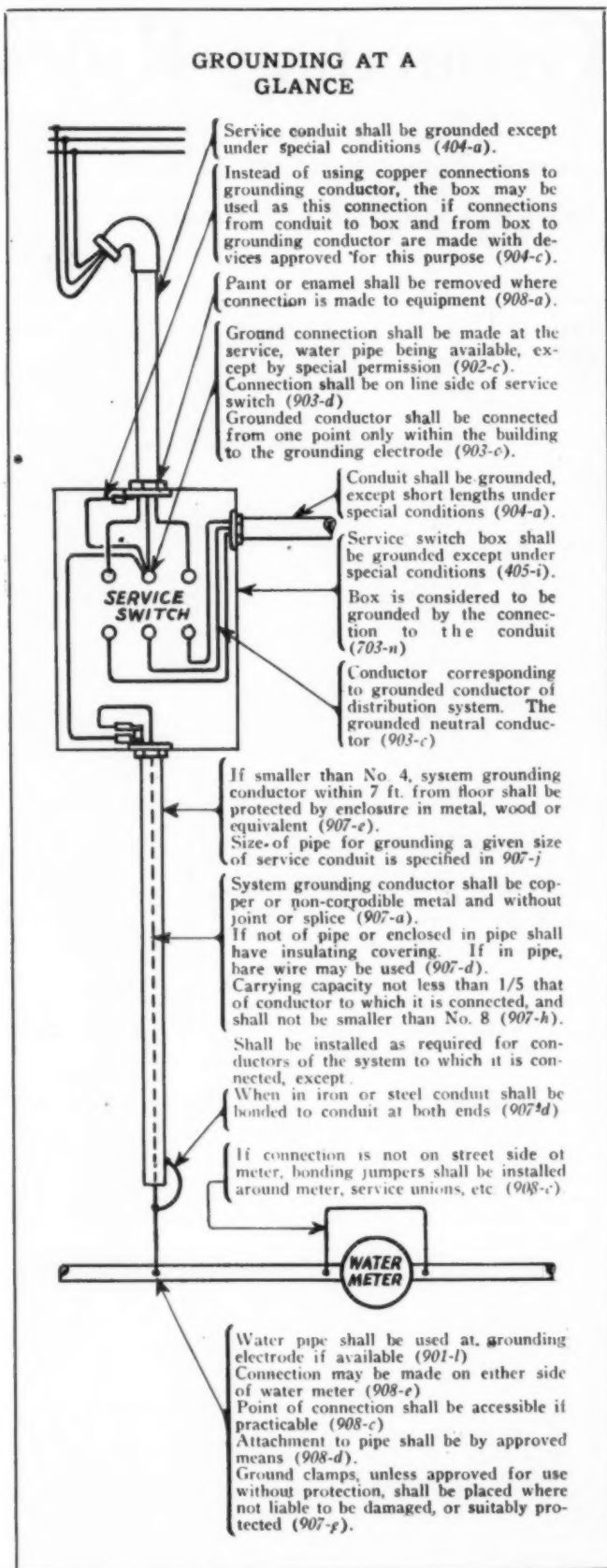
Fuses in secondary mains must not leave any part of system without a ground if fuses blow (902-d).

Grounding Conductor

For a D. C. system, must have carrying capacity not less than that of largest feeder leaving station, and must not be smaller than No. 8 (907-g).

For an A. C. system, must have carrying capacity not less than 1/5 that of conductor to which it is attached, and must not be smaller than No. 8 (907-h).

GROUNDING AT A GLANCE



III. Interior Wiring Systems

A. System Ground

1. GENERAL REQUIREMENTS

Systems to be Grounded

When a wiring system is connected to an A. C. distribution system having a grounded conductor, if the interior system

contains a corresponding conductor, an additional ground connection shall be made at the service unless omitted by special permission (902-c).

When a wiring system is connected to a D. C. distribution system, no system ground connection shall be made at the service or elsewhere on the interior system (903-a). Electric furnace circuits need not be grounded (903-f).

Conductor to be Grounded

Single-phase 2-wire—the identified conductor.

Single-phase 3-wire—the identified neutral conductor.

Multiphase systems having one common wire—the identified common conductor.

Multiphase systems with one phase grounded—the identified conductor.

Multiphase systems with a 3-wire system taken from one phase—the identified neutral conductor (903-c).

Point of Connection to Wiring System

On the live side of the service switch. For a wiring system not electrically connected to exterior conductor, connection shall be at transformer, generator, or other source of supply, or at switchboard, on supply side of first switch (903-d).

The grounded conductor shall be connected from one point only to the grounding electrode (903-e).

Point of Connection to Water Piping

On either side of water meter. If not on street side, bonding jumpers shall be installed around all meters, service unions, etc. Jumpers shall have no joints and shall have carrying capacity and mechanical protection same as grounding conductor. Point of connection shall be accessible if practicable (908-c).

Point of Connection to Gas Piping

Shall always be on the street side of the gas meter. Bonding jumpers as specified for water piping shall be installed around parts of the piping system liable to be mechanically disconnected (908-e).

III. Interior Wiring Systems

A. System Ground

2. SYSTEM GROUNDING CONDUCTORS

Material

Shall be copper or non-corrodible metal of equivalent conductance, and shall be without joint or splice (907-a).

When not consisting of metal pipe nor enclosed in pipe, shall have insulating cover as required for conductor of system to which it is connected (907-d).

When enclosed in iron or steel pipe and bonded to the pipe at both ends, bare wire may be used (907-d).

Size

Shall have a carrying capacity not less than 1/5 that of conductor to which it is connected (907-h).

Shall not be smaller than No. 8 except that No. 12 may be used for grounding secondary circuits of instrument transformers (907-h, 907-n).

Installation Methods

Shall comply with all requirements for conductor operating at voltage of system grounded, except that when enclosed in iron or steel pipe, or the armor of armored cable, shall be bonded to the pipe or armor at both ends (907-d).

If smaller than No. 4, where within 7 ft. from the floor shall be protected by enclosure in metal, wood or equivalent protective covering (907-e).

Shall be attached to a pipe or rod electrode (1) by a bolted clamp to which conductor is soldered or connected in other approved manner, (2) by an approved device screwed into the pipe or a pipe fitting, (3) by other approved means (909-d). Ground clamps or similar fittings, unless approved for use without protection, shall be placed where not liable to be damaged, or shall be protected by enclosure in wood, metal or equivalent protective covering (907-e).

No automatic cutout or switch shall be placed in the conductor unless opening the device disconnects all sources of energy from the installation (907-c).

III. Interior Wiring Systems

B. Equipment Ground

1. GENERAL REQUIREMENTS

Equipment to be Grounded

Metal conduit, armored cable, metal raceway, metal underfloor duct, electrical metallic tubing and other metal raceway, except runs of less than 25 feet, free from metallic contact with the ground and from adjacent grounded metal and guarded within reach from grounded surfaces (904-a).

Service conduit need not be grounded when (1) the voltage of its conductor is not over 150 volts to ground, and (2) no contained conductor is connected to a wire of an underground system exposed to other circuits of over 150 volts to ground, and (3) the conduit is isolated from grounded surfaces, and (4) the conduit is not exposed to contact with persons or materials which may be in contact with other conducting surfaces (404-g).

Fixed equipment: Service equipment (401-i). Generator frames (1003-f). Motors (1003-l). Auto-starters (1005-e). Switch and circuit-breaker enclosures (1202-d). Lighting fixtures (1403-a and b). Arc lamps (1502-b). Mercury-vapor lamps (1503-d). Heating appliances (1606-a). Motor frames, track and frames of all electrical cranes, elevators (3104-a to d). Equipment in hazardous locations (3203-p, 3204-m, 3205-m). Equipment in garages (3308-a). In motion-picture studios (3402-i). All signs and troughs for outline lighting, equipment in theatres (3901-d). Vacuum and inert-gas systems (5002-e). On systems of over 600-volts (Art. 50). Transformer cases (5005-c). X-ray apparatus (5012-g). Cases and exposed metal parts of instruments, meters and relays under conditions specified in (907-n and 1302-g).

Portable equipment: Motors operating at over 150 volts to ground (1003-l). Lamps and other devices in hazardous locations (3203-n, 3203-o, 3204-k, 3204-l, 3205-k).

Point of Connection to Equipment

For metal conduit and all other metal ducts or raceways, as near as practicable to the source of supply. Point shall be such that no run is grounded through a run of smaller size, unless 907-k is complied with (904-b).

Point shall be accessible, except that for conduit and other ducts or raceways point shall be accessible if practicable (905-d, 906-d, 904-f).

Point of Connection to Water Piping System

Same as for a system grounding conductor (908-c).

Point of Connection to Gas Piping System

Except for grounding small fixtures, same requirements as for a system ground (908-e). For grounding small fixtures, the grounding conductor may be connected to gas pipe at any point, but gas pipe must be bonded to water pipe, if available, at their points of entrance. If no water pipe, a bonding jumper shall be installed around gas meter (908-e).

III. Interior Wiring Systems

B. Equipment Ground

2. EQUIPMENT GROUNDING CONDUCTORS

Material

May be copper, rigid metal conduit or metal pipe, except that copper must be used under conditions favorable to corrosion (907-a).

Metal enclosures for conductor and separate grounding wires in assemblies with circuit conductor are considered suitable (907-a).

Size

For size of wire or pipe used as a grounding conductor for a service conduit, see table in (907-j).

For size of wire or pipe used as a grounding conductor for conduit other than service conduit and for other equipment, see table in (907-k).

Where pipe is used, connection thereto shall be made by means of approved connector. Threaded connections are preferable (907-k).

No. 18 copper wire may be used to ground portable equipment if conductors are protected by fuses or circuit-breakers rated not over 15 amp. (907-l).

For grounding cases of instruments conductor shall be not smaller than No. 12 (907-n).

CONTRACTING

Installation Methods

Protection shall be same as for a system grounding conductor (907-e).

No part of a service switch box shall be used as a grounding conductor for service conduit or cable sheath, except where box is in a dry, non-corrosive location and connections to box are made by special devices approved for this purpose (904-c).

On circuits over 150 volts to ground, the conduit system shall be made electrically continuous by threaded or threadless fittings, bonding jumpers, or two locknuts, one outside and one inside of each box or cabinet (907-b).

Runs of metal conduit or other metal raceway shall be so installed as to secure adequate electrical continuity (503-g, 504-f, 505-e, 506-f, 508-b).

Attachment of an equipment grounding conductor to a pipe or rod shall be same as specified for a system grounding conductor (908-d).

Ground clamps shall be placed where not liable to be damaged or enclosed in protective covering (907-e).

Where connections are made to equipment, any paint or enamel shall be removed (908-a).

No automatic cutout or switch shall be placed in an equipment grounding conductor unless the opening of the device disconnects all sources of energy (907-c).

IV. Grounding Conductor for Lightning Arresters

Size

Shall not be smaller than No. 6. Shall have sufficient current carrying capacity to insure continuity and effectiveness of path to ground under excess current caused by the discharge of the arrester (907-i).

Installation Methods

Where consisting of wire smaller than No. 4, within 7 ft. from the floor shall be protected by enclosure in wood, metal or equivalent covering. Protection shall be non-magnetic material, or conductor shall be connected to both ends of the protective covering (907-e).

Where practicable, shall be kept at least 20 ft. from system or equipment grounding conductors (907-i).

V. Interconnection of Grounding Conductors

Interior Wiring Systems—System and Equipment Grounds

The system grounding conductor may be used for grounding equipment, but only when the supply system is grounded at two or more locations not in the same building to a continuous metallic underground piping system. Where artificial grounds are used the two grounding conductors shall have separate electrodes (904-d).

Lightning Arrester Grounds and Other Grounds

The grounding conductor for a lightning arrester shall not be connected to an artificial ground electrode used for a system or equipment ground (907-i).

At supply stations, system, equipment and lightning arrester grounding conductors shall all be connected to the same piping system if used as the grounding electrode (908-b).

Lightning Rods and System or Equipment Grounds

System or equipment grounding conductors shall not be connected to lightning rods (907-m).

Instrument Transformer Secondaries, Instrument Cases, and Circuits or Equipment

Secondaries of instrument transformers and cases of instruments operated from such transformers shall not be connected to a grounding conductor used for other circuits or equipment, except where a general ground bus is provided (907-o).

The Erection of Sectionalized Poles for Swimming Pools

Assembly and wiring prior to erection saves time over other methods. Pictures taken at new Riverside Cascades pool in New York City show how such work is handled by the Regent Electric Construction Company.

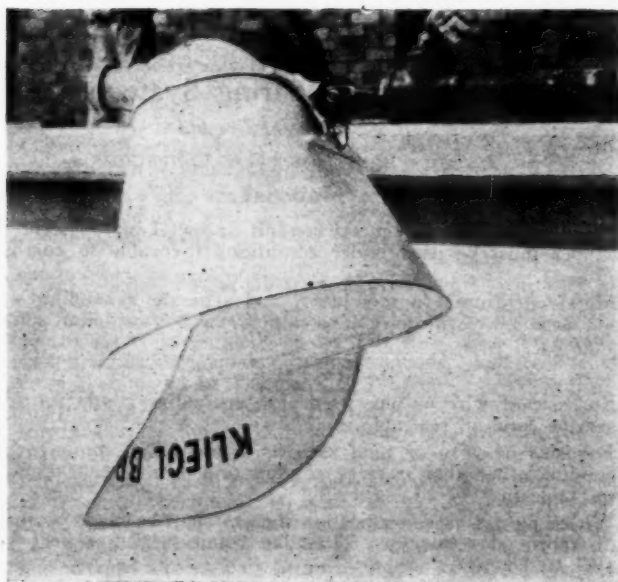


The pole sections were assembled and bolted together while laying on the pool deck where they were easy to work with. Wire was then pulled in. Lead covered wire was used in the poles in all exposed places and in all conduits surrounding or near the pools.

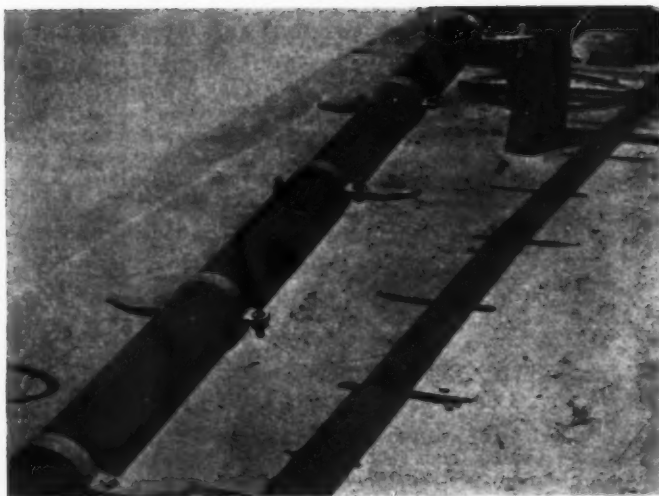


A regular service fitting was attached to the top of the poles and the wires pulled through ready for the reflector.

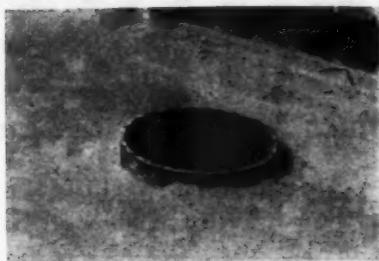
After the poles were assembled and wired, Kliegl No. 562 reflectors were attached.



Pole steps were attached before hoisting as they were easier to install.



ed Poles of Lighting

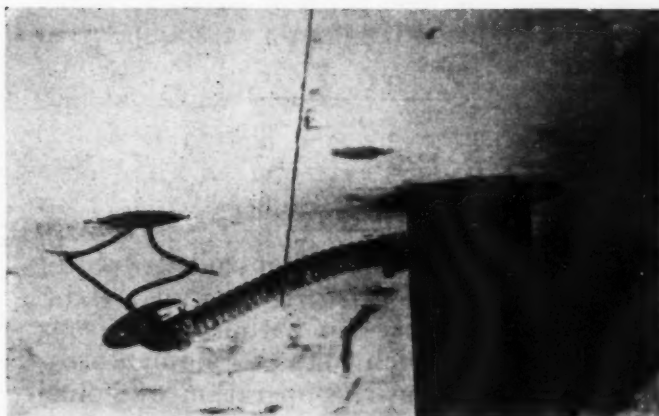


The poles were slipped through steel sleeves in the concrete pool deck and the floor below and attached thereto.

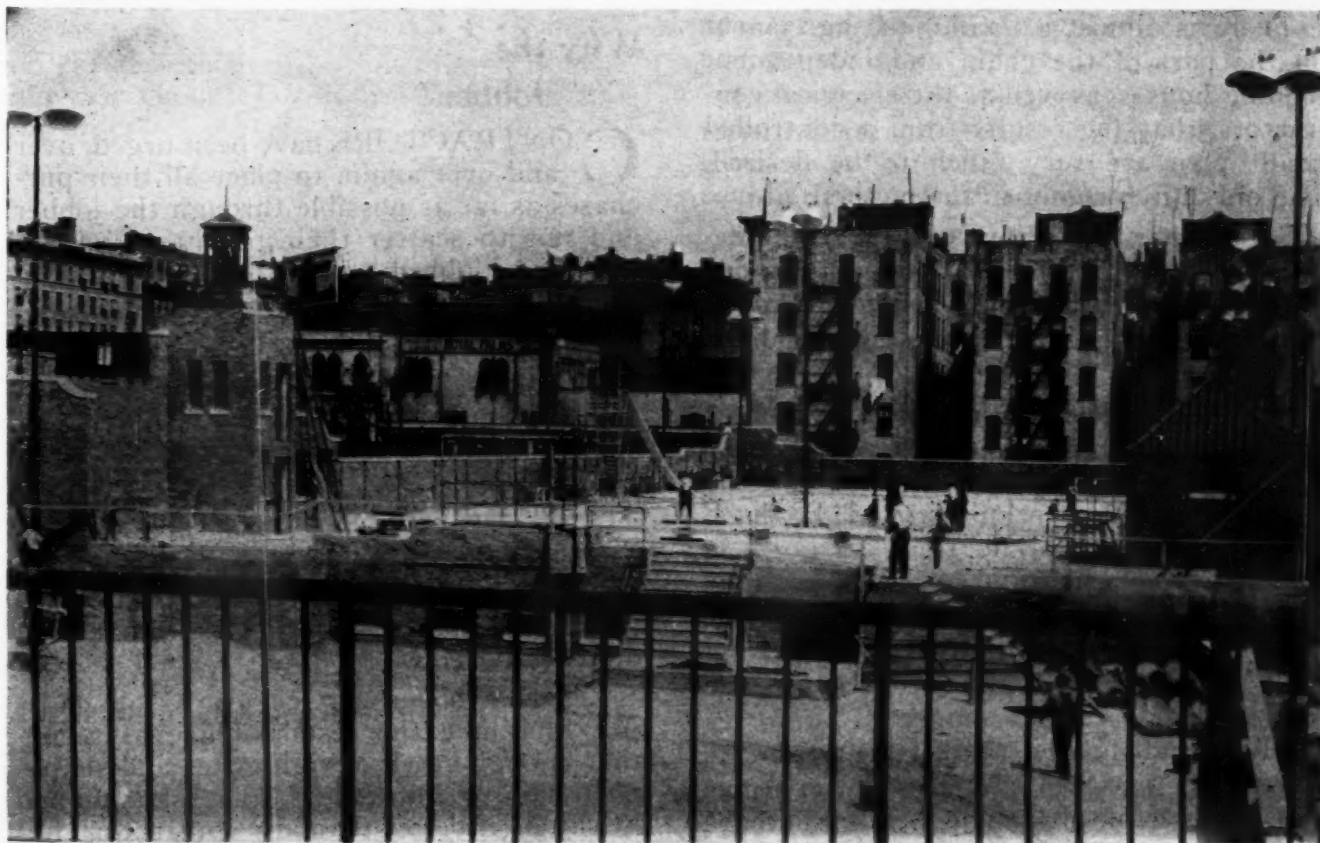


Type of connector and flange by which the bases of the poles were anchored to the steel sleeves in the floor below the pool deck.

The electrical connections to the poles were made in outlet boxes located in the under side of the pool deck near where the poles came through. The pole wires were passed through a short piece of Greenfield which was inserted in the pole and attached to the outlet box by means of a regular flat cover. This illustration shows the connections ready to be soldered and taped.



The pools and part of the beach as they were nearing completion. The reflectors at the extreme edges of the picture are directed on the beach alone.



Electrical Contracting

With Which Is Incorporated The Electrician

S. B. WILLIAMS
Editor

The New Competition

A NEW competition is raising its head in the electrical contracting industry—golf. The contractors in a number of cities are regularly holding tournaments or meets.

When men can play together regularly only good can result. Out of it must come a new brand of competition—and it can't come too soon.

A Little Sand in the Gear Box

WHILE interest in controlled credits continues to grow, the action of the chain jobbing houses in withdrawing from participation in such plans is momentarily putting a check on the operation of going plans.

There is almost a unanimous agreement on the part of the chain and independent jobbing houses, as well as the electrical contractors, that the results from a controlled credit plan are very much to be desired. The only hitch comes in the method.

Several prominent lawyers working independently of each other have pointed out the legal difficulties that such plans might run into. These opinions are not to be unheeded.

It is safe to say that in none of the plans now operating has anything been done willfully to restrain trade. In the heat of the moment, certain enthusiasts might have said things that did not look so good in print. Certain things have been done that to the lay mind are fair and in the public's interest, but which are all wrong from the legal point of view. Moreover, there have been certain excesses committed—unfortunately. And, finally, there have been certain tie-ups between the electrical contractors and organized labor which, while hav-

ing nothing to do with credits, are of such a nature as to becloud the issue.

Nevertheless, we are confident that something will come out of the work that has been done. When both jobbers and contractors want controlled credits, it does not seem unreasonable to suppose that a workable plan will be found—one that will pass muster legally.

For that reason, we suggest to those cities now considering such an activity that they more or less mark time for a month or two. And to those cities now operating on such a plan we say, do not get discouraged over the dropping out of the chain houses—hold tight for a month or two.

If a national plan is forthcoming, it should be used in preference to others and, also, it will probably be the only one acceptable to the lawyers of the chain groups.

Why the Jobber?

CONTRACTORS have been urged, over and over again, to place all their purchases as far as possible through the jobber and not to scatter their purchases with a number of jobbers.

This isn't said for the purpose of being good fellows and playing ball with the jobbers, but because it will save money for the contractor. When a contractor buys direct, he has to spend time and money in a purchasing department, his freight and cartage bills go up, his deliveries are less certain, his breakage loss is larger. The difference in cost between the price from the manufacturer and that from the jobber is, as a matter of fact, smaller than the cost of handling direct purchases.

Let the jobber service every job daily. Let him take the responsibility of seeing that enough stock of right sizes and shapes is on hand when needed. That's his job and he can do it better than any contractor. Let

the jobber do the warehousing. That's one of his major functions.

And then, if the contractor confines his purchases to one house, that house can render invoices against the job, thereby doing all of the material costing for each job as well. The time saved in this item alone should warrant a contractor discontinuing the practice of shopping and buying all over the lot.

The jobber can save the contractor money in many ways if his service is properly used.

Industrial Reflectors

A WELL known merchandising specialist in the electrical field suggested the other day that electrical contractors might find it to their advantage to make industrial lighting reflectors leaders and offer them to factories at around cost, talking all the while about increased production, eye fatigue, smaller spoilage, etc. The theory of this kind of selling is that the prospect can be made to want the better lighting while thinking only of the low cost of the units. Almost invariably, however, an order for units results in an entire revamping of the wiring.

Don't talk wiring until after the reflector order has been signed. You will get the wiring easy enough if you first land the reflector order.

The Last Word in Price Cutting

AN apartment house was about to be built and bids were requested. The favored electrical contractor was not alone—there were five or six other bidders. After the bids were opened the favored one was given the opportunity to have the job at a little under the low man's bid, provided he would take a percentage in stock.

That is price pruning to a fare-you-well. The paper is worthless at the time the building goes up. In three or four years' time it might be worth anything up to fifty cents on the dollar.

It would not be so bad if the contractor was alone in the bidding and could make his

price sufficient to enable him to gamble a bit on the paper. But to offer the work at less than the lowest bid and then with ten to twenty-five per cent in no-good paper is too much.

Why do electrical contractors fall for that kind of a deal? The chances for extras are very slim. It's got any price-cutting scheme we ever heard of beaten a mile.

Significant Facts

FOR years the central stations have insisted that inadequacy of wiring was due largely to high installation costs. We have been equally as positive that the utility men who talked that way were "all wet." Further facts bear us out.

The statistical portion of the Thompson report to the Industry Sales Conference on the residential market has just been released by The Society For Electrical Development. Thousands of homes were checked and hundreds of women interviewed. The report states that the majority of the women who were interviewed *did not want additional outlets!*

How are we ever going to make wiring adequate if the public has not been educated to want wiring?

In St. Louis the local league in an effort to stimulate additional wiring offered to give away an outlet per house—they couldn't even give them away.

The public didn't want additional wiring.

Inadequate wiring is costing every branch of the electrical business money every day in lost business—but most of all is it felt by the contractor.

This market is never going to be developed by reduced wiring costs. Even if the material were given away—the labor and sales expense would cost considerable. The public must be made to *want* additional wiring and the cost must be borne by that group most benefiting thereby—the central stations.

The central stations owe it to the contractor to get busy and educate the public to *want* additional wiring.

The contractor's job is to see that the public gets what it wants when it wants it.

Code Chats

A Monthly Discussion of Wiring Practice and Questions of Interpretation, Presented with a View Toward Encouraging a Better Understanding of the National Electrical Code - - -

Conducted by F. N. M. SQUIRES

Assistant Chief Inspector, N. Y. Board of Fire Underwriters

Fixture Switches

There are many side wall bracket fixtures on the market today which are not properly designed nor constructed to provide a suitable location for the fixture switch. The fixture should be so constructed that the switch will be located in a compartment formed by the canopy and the outlet box.

In the fixtures complained of the switch is located outside of the area of the outlet box with the result that the wires between the switch and the circuit wires are jammed between the back of the fixture and the wall. Then if the outlet box has been set so as to protrude beyond the finished wall the wires are jammed against the edges of the box. A fire was

recently caused by this and numerous instances of fuse blowing have been reported.

Of course, the proper construction is to have the switch so located that it comes within the area of the outlet box.

* * *

Motor Rating

Rule 1003-m provides that each motor name plate shall provide, among other data, the full load ampere rating of the motor. Discussions have lately shown that there is some confusion as to just what the full load rating, as given on the motor name plate, refers.

For instance, the question has been asked as to whether on a 3 phase motor the rating given on the name plate refers to the current required by each phase coil

which in turn must be multiplied by $\sqrt{3}$ in order to find out how much current we must provide circuit wires for or whether this computation is taken care of by the given rating.

Inquiry of the motor manufacturers brings forth the information that the rating given is the "per circuit wire" current and not the "per coil" current. In other words, it is the current for which we have to furnish the proper capacity in the circuit conductors. That is, the current "per coil" has already been multiplied by $\sqrt{3}$.

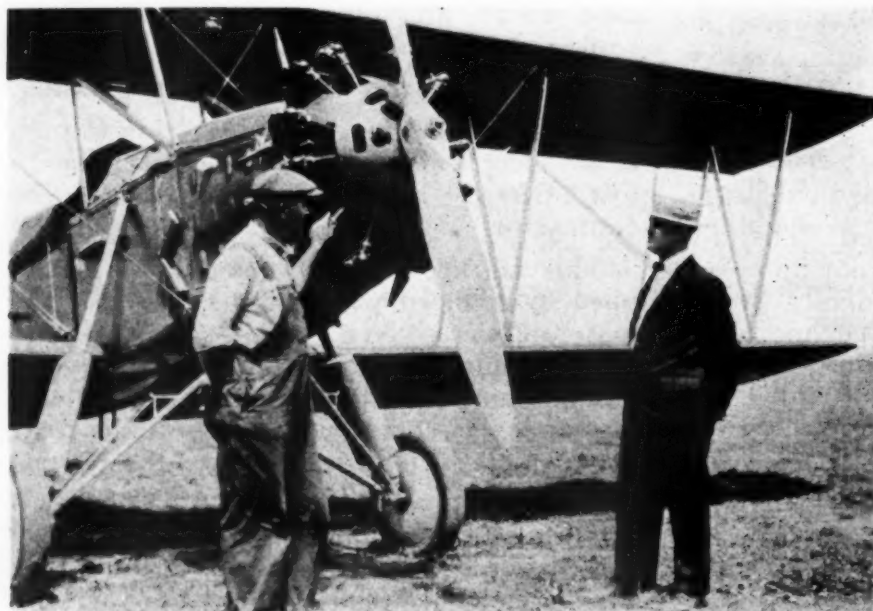
But don't forget that where three wires are used to feed a 2 phase motor the common wire must be of sufficient size to carry the value of current obtained by multiplying the given rating by $\sqrt{2}$. For in this case the manufacturer has provided four leads and has given the rating accordingly.

* * *

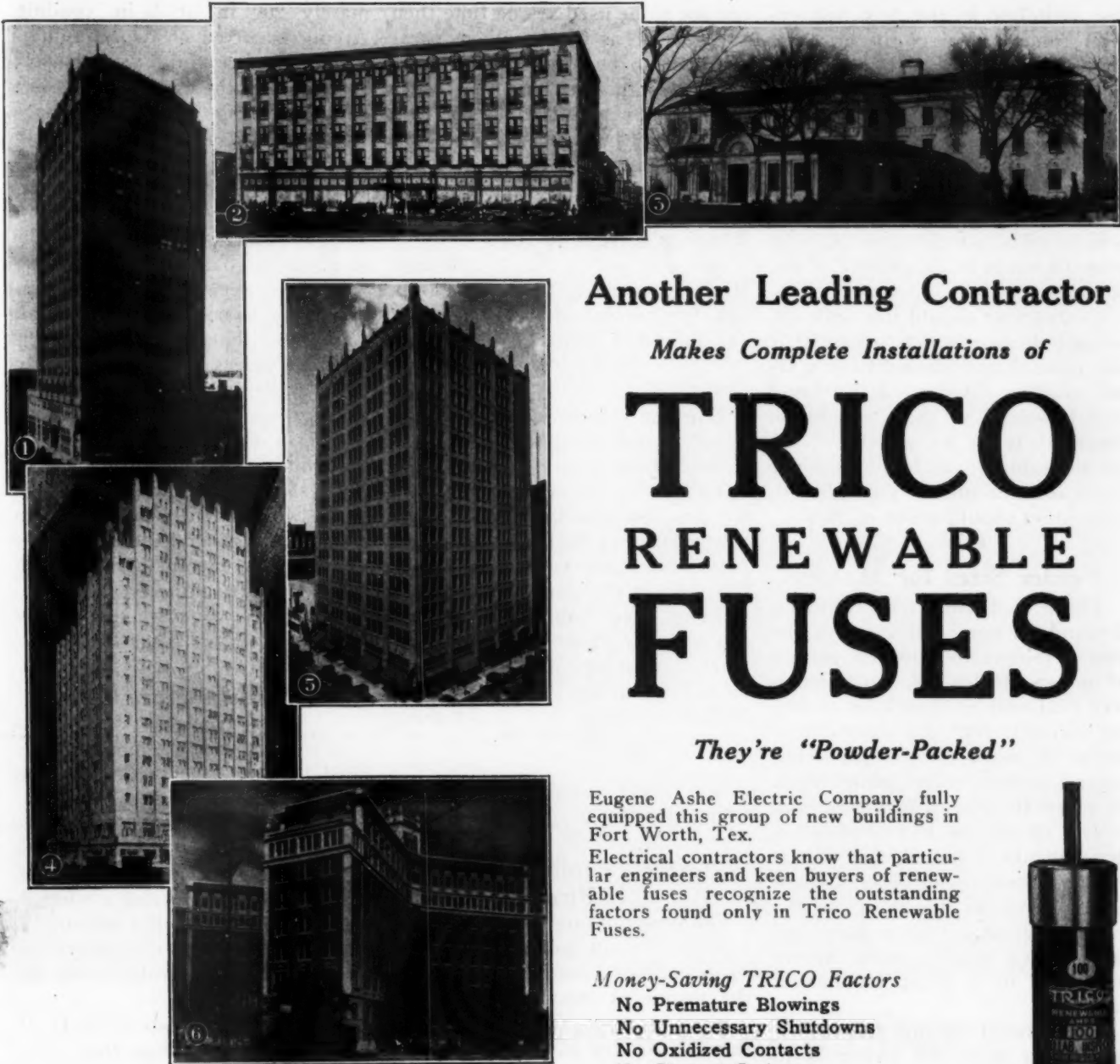
Switches on Panel Boards

A panel board is a convenient place to locate switches, especially in a store occupancy, and, of course, it is handy to have them controllable without having to open the panel board doors. It has been found that some box and cabinet manufacturers have arranged for the mounting of flush switches to meet this desirable feature but instead of mounting them independently of the cover of the cabinet have arranged that they be fastened directly to the covers. This scheme will not permit the cabinet to bear the label of the Laboratories and, of course, should not be approved in the field.

The proper method is to mount



DOES ELECTRICAL WORK FOR AIRPORT:—H. M. Stradling (right) of the H. H. Stradling Electric Co., Indianapolis, Ind., with his superintendent, at the Mars Hill flying field, where the Stradling crew was at work.



LIST OF BUILDINGS

All in Fort Worth, Texas

- | | |
|---|--|
| 1 Medical Arts Building Wyatt C. Hedrick, Architect, Fort Worth | 4 Blackstone Hotel Elmer G. Withers, Architect, Fort Worth Mauran Russell & Crowell, Architects, St. Louis |
| 2 Sanger Bros., Inc., Department Store Wyatt C. Hedrick, Architect, Fort Worth | 5 Petroleum Building Wyatt C. Hedrick, Architect, Fort Worth |
| 3 Cook Memorial Hospital W. G. Clarkson, Architect, Fort Worth | 6 Methodist Hospital W. G. Clarkson, Architect, Fort Worth |

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the switches in the box but entirely independent of the cover so that the cover can be removed without disturbing any of the wiring in the cabinet. With the switches attached to the cover extra leads of stranded wire have to be run from the circuit wires and cutout blocks to the switches which adds considerable to the mass of wires in the gutters of the cabinets.

Contractors should use only approved devices which means that the panel board should bear a label reading "Approved Enclosed Panel Board" or there should be three labels on the assembly, one for the cabinet, one for the cabinet front and one for the panel board. Inspectors should insist on this.

* * *

Feeder Sizes for Motors

There is a constantly growing demand for some ruling as to the size of feeders required for groups of motors. Rules 808-A to J inclusive deal only with individual motor circuits, the only mention of feeder or main circuits supplying several motor circuits being 808-K in which the size of main required is left up to the local inspection departments. In one way this is not good and yet in other ways it is a very useful rule as conditions vary so greatly that a hard and fast ruling might work severe hardships in a great number of cases.

The general scheme for doping out feeder sizes for power is to add the sum of the full load running currents of all the motors except the largest to the starting current of the largest. This assumes that all except the largest motor are running when the last one is started. This value in amperes is the Column A rating [Table 1—Article 612 (p. 71)] of the size wire which is required. And note that columns B and C are not used unless the wire employed is not rubber covered.

But where the inspection department knows that conditions warrant it, a diversity factor may be applied, which diversity factor must be very carefully arrived at only after considering all the features of each case. If conditions are such that all of the motors

are apt to be used at one time then the scheme as in the above paragraph is to be followed.

For instance, to find the feeder required for 1 10-H.P., 1 25-H.P., and 1 50-H.P. 3 phase motors we use our motor tables in rule 808 and by reference to Table 4, 220 volts,

| | |
|---|----------|
| Running current 10-H.P. motor | 27 amp. |
| Running current 25-H.P. | 64 amp. |
| Starting current of 50-H.P. (Column 9 of Table 1) | 250 amp. |
| | 341 amp. |

The size of wire required will be found by referring to Section 612 to be 500,000 C.M.

This is on the assumption that we are considering reduced voltage starting or high reactance motors. Had we been considering full voltage starting we would use Column 7 of Table 1 of Article 808 and our figures would be:

| | |
|------------------|----------|
| 10-H.P. running | 27 amp. |
| 25-H.P. running | 64 amp. |
| 50-H.P. starting | 400 amp. |
| | 491 amp. |

which would require 700,000 C.M. wire.

* * *

Loose Coupling Causes Fire

On June 20, one of the 440-volt 3-phase No. 10 gauge wires in a 3/4-in. conduit came in contact with the grounded metal work of the conduit system. The current to earth was over a run of approxi-

mately 200 ft. of 3/4-in. conduit. Arcing occurred at two couplings where the conduit was loosely screwed into the couplings. At one of the couplings baled burlap bags were stored 2 ft. under the conduit, and sparks falling on the bags started a fire. The fuses in the circuit were of 15 amp. capacity. Two of the fuses blew when the short circuit occurred.

We have seen more than one fire caused by loose contact at conduit couplings. The loose coupling is a hidden defect that inspectors can only locate by testing the resistance of each coupling or perhaps putting a current carrying test on the conduit system itself before the system is put into service.

We wonder if it would not be a good idea to amend the Code so as to require a current carrying test on all conduit, armored cable and metallic raceway systems?

George Welman.

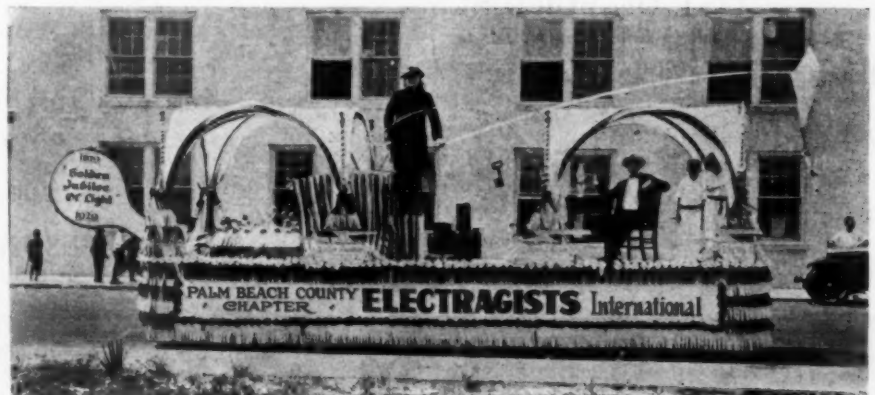
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Switches Before Controllers

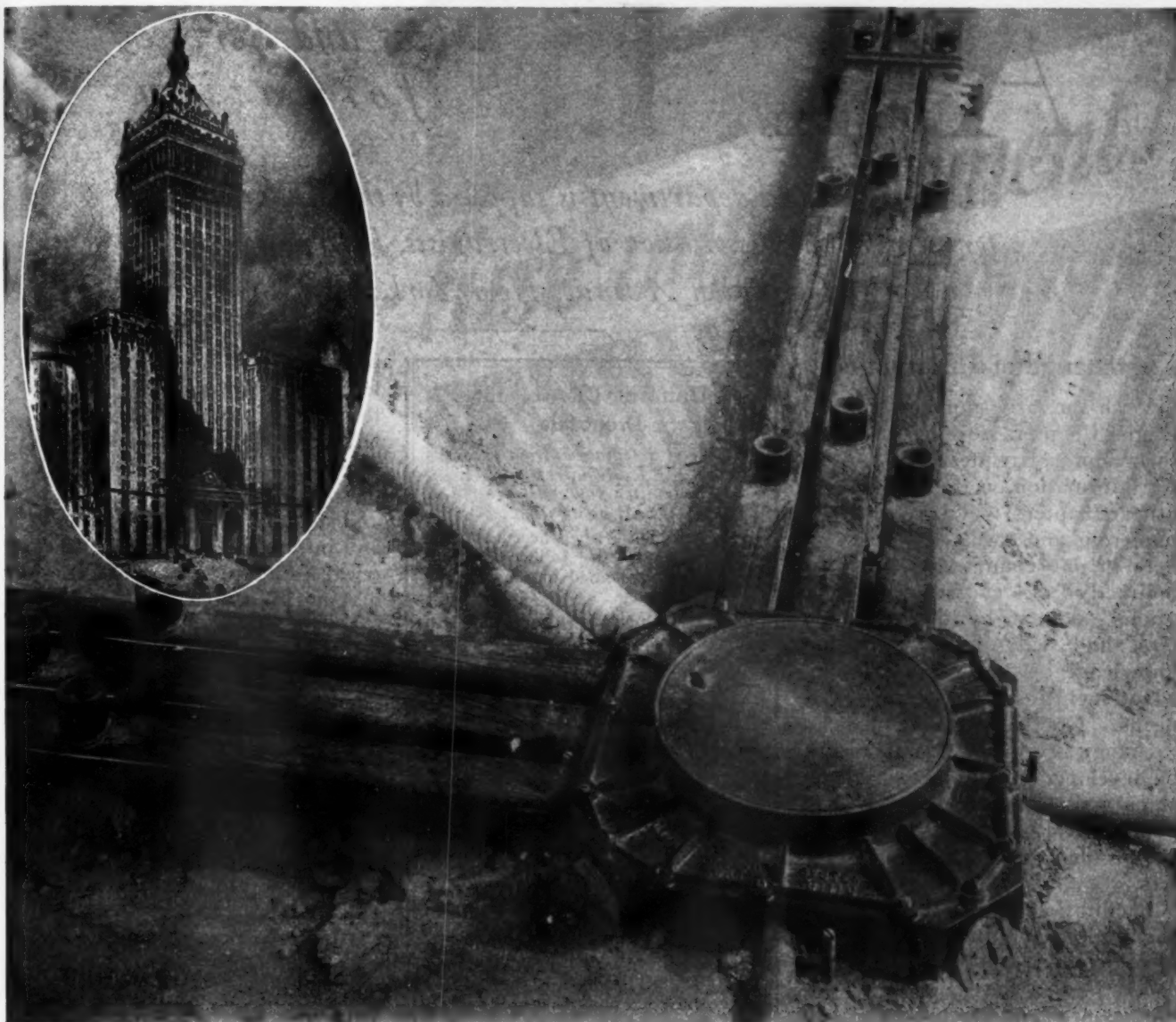
A controller for a motor as defined by Rule 1003 (b), does not mean only a street car type of controller with separate resistance elements located outside the controller box. Any device used to start a motor is termed a controller, and Rule 1003 (b) requires a standard switch to disconnect the motor and the controller from the supply of current.

For connected loads of 50 H. P.

(Continued on Page 120)



ELECTRAGISTS JUBILEE LIGHTING FLOAT:—The Palm Beach County Chapter of the Association of Electragists entered a float in the July 4th Mardi Gras celebration of Palm Beach which was commemorative of the Golden Jubilee of Light. The float pictures Benjamin Franklin with his kite and Thomas Edison studying the light bulb. In the rear of the float, two boys represent present day electragists, one boy being shown working on a fan and the other fixing a light. A generator installed on the float furnished the energy for the night parade.



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A. E. I.

News and Service Information

Material for this department is supplied by the headquarters staff of the Association of Electragists, International, 420 Lexington Avenue, New York, N. Y.

Exchange of Information

With the large number of Electragist Chapters now in operation, the reciprocal request of Chapters for information on the activities of other Chapters will become more numerous and specific. The members in one community will hear indirectly of constructive programs adopted by distant chapters, and will desire first-hand knowledge of the details so as to adapt such programs to their local needs. Gradually from such an exchange of information there can be developed helpful acquaintanceships and a natural uniformity of policies and methods in meeting the problems common to all chapters.

Facilitating this direct inter-chapter contact, there will appear in this section of a later issue a list of the names and addresses of Chapter representatives, who may be freely approached on Electragist Chapter matters by the members of other Chapters. Such an exchange between members can be of immeasurable value in solving local problems of separate communities simultaneously, with the aid of the cumulative experience of all Electragist Chapters.

* * *

New Estimating Manual

A new complete and revised manual entitled "Estimating for Electragists" has recently gone to press and will be available to members of the Association of Electragists, International, within a few weeks. The book will include the subject matter of the entire series of articles on estimating methods, prepared by Arthur L. Abbott, formerly Technical Director of the A.E.I., which appeared

Uniform Clauses for Proposals

[This is a tentative draft prepared by the A.E.I. Architects and Engineers committee for consideration at the Swampscott convention.]

This proposal when accepted shall include any of the following stipulations not embodied in the contract form submitted.

1. Unit prices submitted with this proposal shall apply only for additional work.

2. No pro-rata or other charges shall be assessed against the contractor unless it is so stated in the original specifications.

3. The contractor has the privilege of using any make of material or equipment as indicated in the specifications or shown on the plans unless the selection of the material shall have been made prior to the signing of the contract.

4. Overtime work is not contemplated and shall not be required as a part of this contract. If it is necessary to work overtime, the expense for such overtime shall be paid the contractor, plus overhead and profit, and shall be agreed upon before the contractor is required to proceed.

5. The contractor shall request written orders for all additional work whether it be on a contract price, unit price, or time and material basis, before proceeding with such extra work.

6. Payments for additional contracts to the original contract shall be made under the same terms and conditions as are embodied in the original contract.

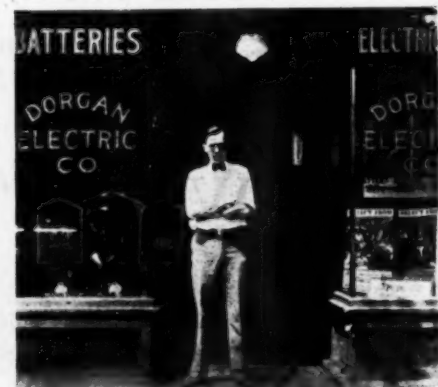
7. Payments shall not be withheld on this project because of any delays caused by other trades over which the contractor has no control.

8. The contractor shall not be required to proceed with the installation of the work if the payments applying on same have not been made as specified in the contract.

9. In case of disputes arising between the contractor and others in connection with the fulfilling of this contract, it is agreed that the involved parties will submit their claim before a Board of Arbitration for final decision.

in "The Electragist" and "Electrical Contracting" from June, 1927, through February, 1929; together with the complete tables given in the Electragists Data Book "Manual of Estimating" revised to date, and a quantity of additional data and information invaluable to electrical estimators and Electragists making their own estimates.

It has been prepared with careful regard for easy use, with frequent subject headings and index. Well printed and attractively bound in the convenient 6x9 inch size, this manual is well worthy of a prominent place among the important text-books and reference works to be frequently consulted by every Electragist, and should find constant use in the offices of a large proportion of the A.E.I. membership. No previous publication or electrical estimating provides a more complete analysis of estimating methods or more accurately compiled data between two covers.



SPECIALIST IN REFRIGERATOR WIRING:—William L. Dorgan, proprietor of the Dorgan Electric Co., South Boston, Mass., who has been in the electrical business for about eight years has for some time been specializing in wiring for refrigerators both of the commercial and domestic types, and as a result is now averaging from two to three installations of this type each week.

Another fuse improvement!

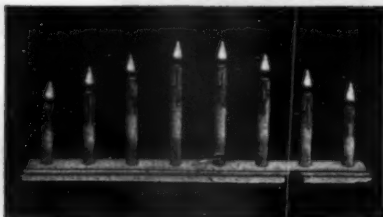
ROYAL CRYSTAL GLASS TOP FUSES



with the new **HEXAGON HEAD**

Royal Glass Top Fuses (patented May 1st, 1928) are approved by Underwriters Laboratories, Inc.; Factories Mutual Fire Insurance Cos., and other Testing Laboratories.

THE ROYAL CANDELITE equipped with genuine Mazda Lamps A patented Christmas novelty in which you will be interested. Watch for announcement in next month's issue.



Two years ago Royal Glass Top Fuses revolutionized the fuse industry—they definitely eliminated all guesswork as applied to blown fuses! Royal Fuses show *without a doubt* when blown—the glass top tells instantly!

NOW!

Royal engineers offer still *another* development, the glass top with the **HEXAGON HEAD** for fuses of 15 amperes or less! By redesigning the glass top so that the *entire* head is hexagon (rather than the window only, as required by National Code) the question of fuse selection is definitely simplified for trouble men, sales people and electricians. A combination of convenience and visibility never before possible is now obtainable—only with Royal Glass Top Fuses!

Mail coupon today for sample.

ROYAL ELECTRIC CO.

Chelsea Station

BOSTON, MASS.

ROYAL ELECTRIC CO., Chelsea Station, Boston, Mass.
☐ Please send me samples of Royal Crystal Glass Top Fuses with Hexagon Head.
☐ Please send me information on Candelites ☐ Royal Christmas Lighting
 Name _____
 Street _____
 City _____ State _____

When



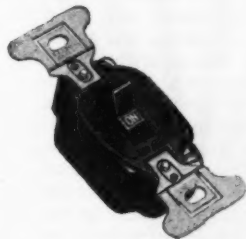
▲
C-H 3-wire Flush Receptacles are in keeping with the latest wiring trend of safeguarding appliances by "grounding". The base is made of heat-proof Thermoplas—the clips of heavy phosphor bronze assuring positive contact and long life. The staked binding screws never loosen—and are large in size for strength and wiring convenience. Made in 10, 20 and 30 ampere sizes. Illustration shows 10 ampere size, cat. 7665. 3-wire C-H Caps have unbreakable, armored shell. Approved by the Underwriters.

▲
C-H Toggle Type Surface Switch has a beautiful Thermoplas cold-moulded base, cap of polished nickel, and a black composition operating lever which indicates whether current is on or off. Made in single pole, double pole, 3-way and 4-way types either solid or slotted base. Approved by the Underwriters.



▼
• SELL • COMPLETE • CONVENIENCE •

the builder wants your help



YOU realize it is your responsibility to keep informed on the improvements in wiring practice and the development of new wiring devices.

Your customers—the realtors—architects—builders—want your assistance in keeping them posted on modern electrical trends. They know it is easier to sell a building when it is completely wired for future as well as present needs.

Tell these customers of yours about the new C-H "Rubber-Mounted" Toggle Switch. All are interested in its *quiet* operation and life-long lasting qualities. The complete enclosure keeps out all dust and dirt—the rubber mounting prevents noise.

C-H "Rubber-Mounted" Toggle Switch (Cat. No. 7281) combines every desirable feature required in a quiet switch. The mechanism—"full-floating" on two resilient rubber cushions—is extremely simple. No screws, and but one unit. No metal connections to transmit sound. Short, stubby contact blades are heavy to prevent "bounce" and pitting. The case—of heat-proof, crack-proof Thermoplas protects mechanism from all foreign material. Made in single pole, double pole, 3-way, and 4-way types. Approved by the Underwriters.

The realtor will find this new switch something his buyer appreciates. It indicates the care and attention given to the details in the home. It is an additional sales point for the building. You, too, will profit by recommending this switch. As with all C-H wiring devices, it is easy to wire and will never

require servicing. Once installed, it works as long as the building stands.

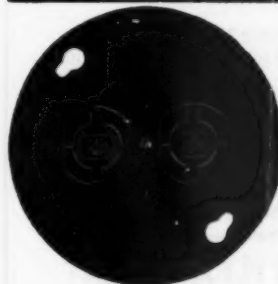
On all your jobs, insist on complete wiring and high quality wiring devices. It will repay you in customer goodwill. Because the Cutler-Hammer line is complete, there is a quality device for every wiring need. Specify C-H on your next job. Write for C-H catalog and order through your wholesaler.

CUTLER-HAMMER, Inc.

Pioneer Manufacturers of Electrical Apparatus
1258 St. Paul Avenue MILWAUKEE, WISCONSIN

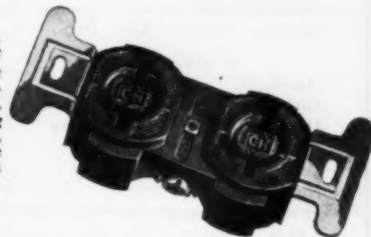
CUTLER HAMMER

MODERN WIRING  NECESSITIES



C-H Catalog 7921 Outlet Box type Receptacles are ideal for garage and similar installations. The duplex type particularly furnishes double convenience for connecting trouble light, battery charger, etc. Included are the same one-piece, double grip, smooth-plugging contacts and other features found in the famous C-H 7920 standard receptacle. Single type has 3 1/4 or 4 inch steel box cover plate. Duplex has 4 inch plate. Approved by the Underwriters.

C-H Catalog 7920 Duplex Receptacles double the number of outlets at slight extra cost. Large binding screws and shallow construction make installation easy. Polarized slots, deep finding ring and one piece, double grip, smooth-plugging contacts make them easy to use. Black or brown finish. Approved by the Underwriters.



♦ ♦ ♦ ♦ ♦ BUILD • GOOD • WILL ♦ ♦ ♦ ♦ ♦

(9644)

CANON OF ETHICS

Adopted for the General Guidance of Members

SECTION 1. Members of the Association shall regard themselves as being engaged in a business in which there is a well defined duty and obligation towards the public and themselves. The business demands that members use every honorable means to uphold the dignity and honor of this vocation, to exalt its standards and to extend its spirit of usefulness.

SECTION 2. Every member of this Association should be mindful of the public welfare and should participate in those movements for public betterment in which his special training and experience qualify him to act. He should not, even under his client's instruction, engage in or encourage any practices contrary to the Rules and Regulations Safeguarding Life and Property, for as he is not obliged to accept a given piece of work, he cannot, by urging that he has followed his client's instruction, escape the condemnation attaching to his act. Every member of this Association should support all public officials and others who have charge of enforcing safe regulations in the rightful performance of their duty. He should carefully comply with all the laws and regulations touching his vocation, and if any such appear to him unwise or unfair, he should endeavor to have them altered.

SECTION 3. It is unbusinesslike for a member of this Association to assist unqualified persons to evade or to lend himself in the evasion of any of the recognized rules and regulations governing electrical work.

SECTION 4. Members of this Association should expose, without fear or favor, corrupt or dishonest conduct and practices of the members of their business, and it is their duty to bring to the attention of the proper authorities the existence of electrical conditions which are unsafe to life and property.

SECTION 5. Members of this Association shall not falsely or maliciously injure, directly or indirectly, the business reputation, prospects or business of a fellow member of this Association.

SECTION 6. Members of this Association shall not attempt to supplant a fellow member after definite steps have been taken toward his employment or toward the letting of a contract to him. Nor should they offer any interference in the carrying out of said contract or commission to the end that loss or damage may result to the fellow member.

SECTION 7. Whenever disputes or differences arise between members, it should be the duty of the parties to the controversy to submit the trouble to an arbitration of two disinterested members of this Association and in the event of a failure to arrive at a satisfactory settlement, then, upon request, the Chairman of the National Association shall appoint a third member of the Commission and the decision of the majority of said Commission shall be final and binding.

New Chapters

During the month closed July 15, three more local associations have completed their 100 per cent Electragist affiliation as A.E.I. Chapters in Omaha, Neb.; Erie, Pa.; and Schenectady, N. Y. The new affiliations reported in this section each month include only those local associations approved for charter and authorized as Electragist Chapters by the A.E.I. Membership Committee, after satisfactorily meeting the eligibility requirements for obtaining charter affiliation rights.

One important clause in the charter agreement provides that all the members of the applicant association must also be members of the A.E.I. before charter rights may be extended. As a result, wherever chapters have been established there is rapidly developing a new group consciousness of the opportunities for improving the electrical contracting business locally under methods soundly established and equally adaptable in principle to all chapters, with the effectiveness possible through well defined organization and aggressive team-work.

* * *

New Applications for Charters

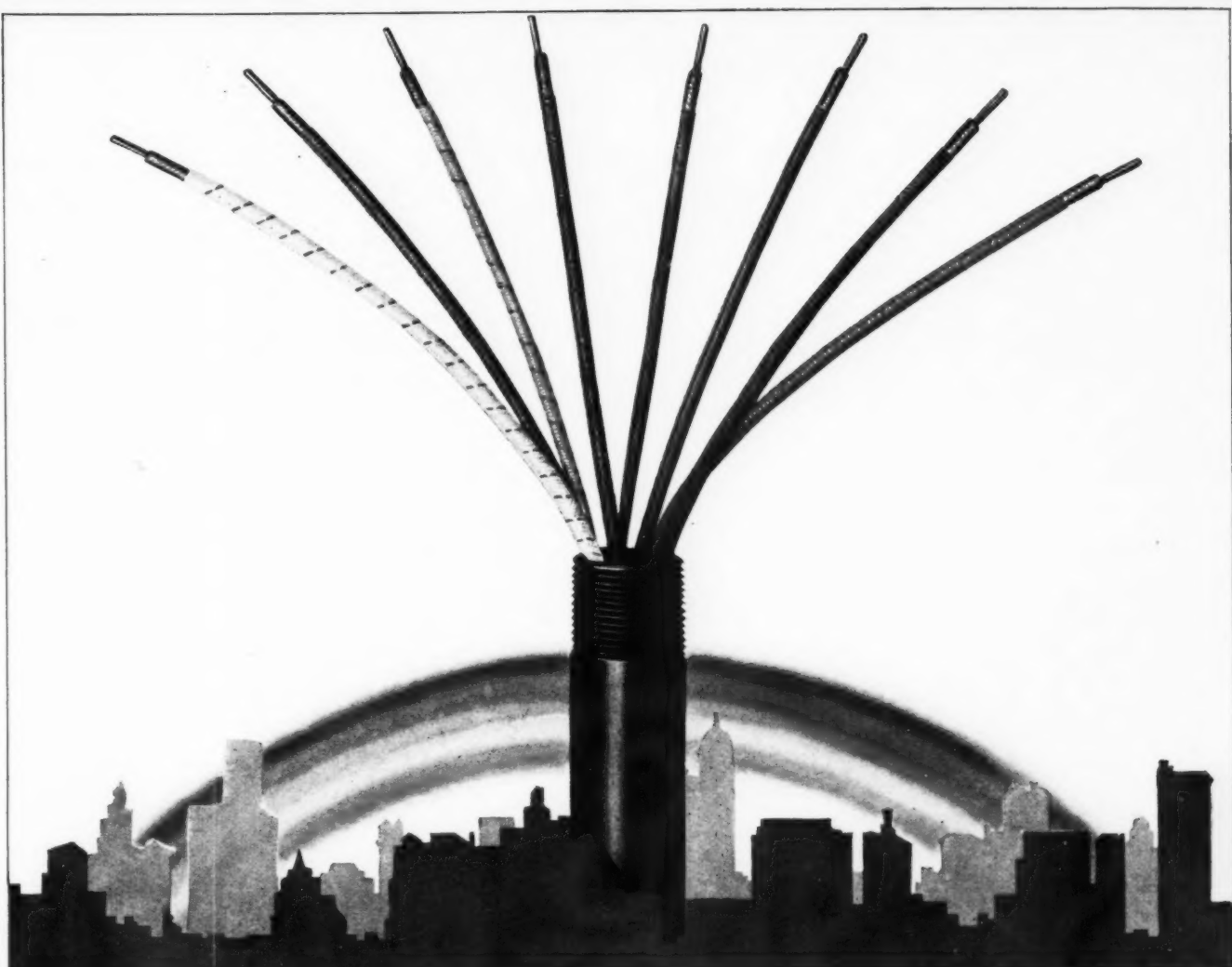
The contractor organizations in Indianapolis, Ind., and Peoria, Ill., and both the Northern Division and Southern Division of the California Electragists have taken official action authorizing application

(Continued on Page 102)

NEW ELECTRAGISTS

The following contractor-dealers have made application and been accepted into the A.E.I. since the publication of the list in the July issue:

| | | | |
|--|---|---|---|
| ALABAMA <i>Birmingham</i> Brooks Electric Co., Inc. | FLORIDA <i>Lake Worth</i> Service Electric Shop | Syracuse T. D. Holihan Industrial Power Int. Corp. Alex F. Jones Electric Co. | WISCONSIN <i>Milwaukee</i> Geo. Poehlman & Son Company Emil C. Schneider Tholen Electric Company H. P. Trostorff Electric Company <i>Oshkosh</i> Domestic Utilities Supply Company <i>Sheboygan</i> Ackers Electric Company |
| CALIFORNIA <i>Anaheim</i> Bungalow Electric Shop Holland Electric Company <i>Fullerton</i> Waits Electric Company <i>Pasadena</i> H. B. Hubbard <i>Santa Monica</i> P. & M. Electric Company | ILLINOIS <i>Rockford</i> Peterson Electric Company NEW YORK <i>Granville</i> Andrew J. Symbolie <i>Schenectady</i> Michael A. Larciprate | PENNSYLVANIA <i>Erie</i> Bauer Electric Company Erie Electric & Sales Service Inc. Garvin Electric Company Globe Electric Company | |



"U.S." Rainbow Line

50% Easier Pulling
Circuit Testing in one-third the time

United States  Rubber Company

We'll gladly serve you through your jobber

TRADE MARK

1790 BROADWAY

NEW YORK

United States Rubber Company, Room No. 480, 1790 Broadway, New York, N. Y.

- ☐ Please send me free samples of the 8 colored wires comprising the "U. S." Rainbow Line.
☐ Please send me proof of the above statements.

Name _____ Address _____

Company _____ Title _____

THE RAINBOW LINE OF "U. S." PARACORE WIRES AND CABLES

GALVAKOTE *and* ENAMELKOTE

Architect

BENJ. H. MARSHALL
Chicago

Builders

BENJ. H. MARSHALL CONS. CO.
Chicago

Electrical Contractor

WHITE CITY ELECTRICAL CO.
Chicago



EDGEWATER BEACH APARTMENT HOTEL *Chicago*

Complete in its entirety with the most modern construction this handsome new apartment building is only one of many throughout the country GALVAKOTE AND ENAMELKOTE equipped. This rigid conduit is approved by the Underwriters' Laboratories

and provides raceways throughout the building for a system of wiring that gives up-to-date adequate-plus distribution of electricity in each and every room. Combines ease of installation and durability that building owners demand.

CLAYTON MARK & COMPANY CHICAGO

Manufacturers of

GALVAKOTE and ENAMELKOTE
SUPER-QUALITY RIGID CONDUIT PIPE

Contracting News

Information of Interest to Electrical Contractors consisting of items of news, short articles, practical ideas, etc. Our readers are invited to contribute to this department.

Columbus Contractors Discuss Organization

A large meeting of the Columbus (Ohio) Electric Contractors Association and the Columbus Electric League was held on June 21 and 22.

The principal speakers were John Kuhlemeyer of Chicago who discussed "Overhead and Profit Analysis"; Mr. Lowery, Chief Building Inspector, Mr. Witt, president, and Mr. Robinson, manager of the Electrical Contractors Association of Youngstown; Mr. Hanson, manager of the Akron Electric League and Mr. Sander-son also of Akron, who talked on the "Betterment of the Electrical Contracting Business."

The Columbus contractors for some time have been discussing the possibility of making a more effective working organization with the hope of rendering better service to the public in this community.

* * *

Philadelphia to Work on Franklin Lighting

The budget of \$6,000 has been approved by the Electric Club of Philadelphia to promote industrial and commercial lighting through intensive work on the Franklin Red Seal plan. Two additional men will be added to the staff of the club who will spend their entire time on direct promotion work.

* * *

Boston Starts Estimating and Credit Plan

A group of twenty-six electrical contractors in Boston now subscribe to the Electrical Estimating Bureau, Inc., which was formed to furnish an accurate and efficient estimating service. This bureau furnishes only estimates on quantities of material, on which the contractor can easily figure his individual costs of material and labor. While this estimating bureau

is still in the experimental stage, its success thus far has been very encouraging. C. L. Heckman has been chosen as manager of the bureau.

Definite steps have also been taken to establish a controlled credit plan in Boston. It is understood that this will probably be a somewhat modified type of the Detroit plan.

* * *

Five-Day Week in Seven Cities

According to the Monthly Labor Review of the U. S. Department of Labor, the five-day week is operating throughout the year for qualified wiremen in the cities of Baltimore, Md.; Butte, Mont.; Portland, Ore.; St. Louis, Mo.; Seattle, Wash., and Washington, D. C. Philadelphia is operating on the five-day week during the summer months.

In addition, New York City goes on the five-day week for all building trades, including the electrical, the middle of this month.

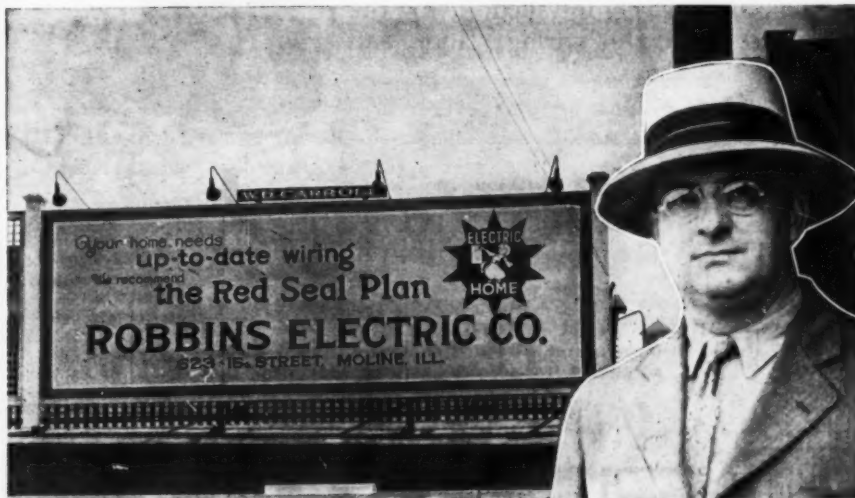
Over 2,000 Red Seal Applications in June

With the shattering of all records in June for applications, the Red Seal Plan gives further indication of fulfilling the promise which its sponsors held for it when first introduced to the industry some five years ago.

Two short months ago there was a murmur when it was announced that 1,000 applications had been turned in for a single month, the month of March. Then in July came the announcement that a new record of about 1,500 had been hung up for April. May was at about the same level with 1,409 applications. And now, when all precincts are heard from, June figures will total more than 2,000 with over 1,500 of these being from United States licensees.

In that story are a number of events that are separate stories themselves. For instance, Washington came through with 845 applications for the month of June.

Marvin C. Clay, field representative of the League and G. S. White



TRI-CITIES RED SEAL CHAMPION:—C. R. Robbins, Robbins Electric Co., Moline, Ill., is the acknowledged Red Seal champion of the Tri-Cities and chairman of the League Red Seal Committee. The 25 by 10 ft. billboard is one way he advertises better wiring to the public. He moved to a new location at Fifth Avenue and Thirteenth Street on July 15.



Levolier
REG. U.S. PAT. OFF.

6

**AMP.
125 VOLT**

Pull Switch

**Lighting Systems Will Be
Overhauled Shortly--Sell Them
This Heavy Duty Fixture Switch**

Overhauling of the lighting systems in industrial plants, office buildings, stores and other places will start shortly. Whether it's to be new fixtures with bigger lamps or the old ones gone over, the main object in mind will be changes to give most economical and convenient service. Get in with the idea of individual control of the units with Levolier Heavy Duty Fixture Switches, for switching the lights on and off whenever and wherever they are most needed. Easily installed, saving the cost of extra wiring, labor and wall switches.



For Office, Store
and Kitchen Units
Fit in Shallow
Ceiling Pans
In Knockout of
Outlet Box
Ideal for Canopies

Rated at 6 amperes, but will take the initial 45-ampere surge of switching a cold 500-watt gas-filled lamp.

Let us send you a sample

Levolier
Pull Switches
Pull Switches
Complete Sets,
Plasma, Lever, Pull
and In-Switchroom
Switches

McGILL
MANUFACTURING CO.
Electrical Specialties of Quality
ESTABLISHED 1904
VALPARAISO • INDIANA

Levolier
Lever Switches
Lever Switches
Lever Switches
Lever Switches
Lever Switches

of the Potomac Electric Power Co. worked in co-operation to achieve this record-breaking total. The previous record was held by Toronto with 569 applications reported last December. For the United States, California made a new high record last March, 490 applications. Washington's record performance surpasses both these old records and sets up a new mark to shoot at.

While during the past six months the plan has been started in nine new territories covering a population of 2,874,933, it is not this new territory that is responsible for the upward trend but the communities which have become fitted to the harness.

Among the new territories where the Red Seal Plan has been put into operation is Philadelphia, the second largest building district in the country. The Electric Club of Philadelphia, under its manager, George R. Conover, inaugurated the plan in spectacular style by obtaining one hundred and forty applications in the first two weeks. The territory covered includes the city and suburbs of Philadelphia. This city has the second largest residential building rate in the United States, being only exceeded by New York. Last year more than eleven thousand homes were erected there, according to Dodge Reports.

R. G. McPhail, supervisor of wiring promotion of The Society For Electrical Development, reports that league managers everywhere are most enthusiastic, not only over the co-operation they are receiving from central stations, contractor dealers and architects, but also over the public reception beginning to be evidenced on all sides.

* * * Residential Wiring Specifications

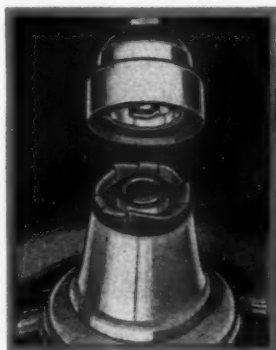
A set of specifications prepared by The Society For Electrical Development to be used for residential wiring are now being distributed to the local electrical contractors who are members of the Metropolitan Electrical League. These specifications give the best practices for wiring residences and apartment buildings, with due consideration to present and future requirements.

**MODERN-EFFICIENT-
DISTINCTIVE -
EASILY PUT UP-
EASILY TAKEN DOWN**



New Benjamin "Type 79" **GLASSTEEL DIFFUSER**

***with Reflector, Lamp and Globe Detachable
as a Complete Unit for Easy Cleaning***



Reflector, lamp and enclosing globe come down as a unit. Bayonet joint locks fixture in place with 60 degree clockwise turn.



Constructed on a unique principle that will maintain the original efficiency of the lighting system at the lowest possible cost for cleaning.

The reflector, lamp and globe, in one complete assembly, can be taken down with one simple movement; a clean unit snapped in place over moving machinery or other working area and the dirty unit cleaned without loss of productive time.

No other fixture obtainable can compare with the new Benjamin 79 Glassteel Diffuser for simplicity and ease of installation. No removal of holding screws or other reas-

sembling. There are only two elements — the wiring base or hood and the removable unit, consisting of the reflector, lamp and globe.

The bayonet joint locks the two parts rigidly together, and also completes the electrical connection.

The new unit is National Electrical Code Standard and is "Certified by Benjamin." Look for the red diamond label of quality on your lighting equipment. It is your assurance of high lighting efficiency and dependable operation over long periods of service.



***Write for Bulletin 79, giving complete information
on the distinctive features of the new unit.***

BENJAMIN ELECTRIC MFG. CO.

General Offices and Factory

Des Plaines (Chicago Suburb), Ill.

NEW YORK

CHICAGO

SAN FRANCISCO

Contractors Are Interested In ABOLITE Units



TYPE BXMK

Type BX Reflector with 4" Outlet Box Cover.



TYPE RXQM

Type RX Reflector with 4" Outlet Box Cover.



Easy to Wire. Everything Accessible. Interchangeable.

Contractors have been quick to recognize the quality and superiority of ABolite Reflectors. ABolites specified on the job mean correct lighting at minimum cost. The interchangeable features of the holders and reflectors effect great savings in maintenance costs.

ABolites Give Proper Illumination

Definite facts and production figures have convinced many plant executives that an investment in proper illuminating equipment increased the productivity of their plant, cut down accidents and increased profits. More light where it does the most good has shown many a plant operator that ABolites were a paying investment. ABolites are made in all sizes and shapes to meet your individual needs.

ABolites Meet All Conditions

The adaptability both in form to fit a given lighting need, and interchangeability of holders to meet your requirements provides the user of ABolites with the ultimate in lighting efficiency. The numerous shapes and broad selection of holders in the ABolite line insures proper lighting at all times.

*Easy to Wire—Easy to Clean—
Easy to Change*



If you have not yet received the new ABolite Catalogue No. 180, write now for complete information on all lines of ABolite Porcelain Enameled Reflectors.

The ABolite Reflector Co.

2400 East 75th Street

Cleveland, Ohio



Pioneer Pacific Coast Firm Reorganizes

The Quality Electric Works of Los Angeles which was established thirty-four years ago has reorganized with A. W. Wotkyns, president, secretary and treasurer; J. B. Martin, vice-president and J. M. Bowden, director. S. M. Karicofe who has been president since 1913 is retiring.

The company specializes in industrial wiring and motor repairs.

* * *

Springfield Association Elects Officers

On June 5 the Electrical Contractors Association of Springfield, Mass., whose activity has been rapidly increasing, elected its new officers. A. F. Page, Star Electric Co., is now president; E. E. Carroll, of the Carroll Electric Co., vice-president; Harry Heyman of the Standard Gas and Electrical Supply Co., secretary, and H. W. Hazelhuhn, treasurer. The board



A. F. Page

of directors consists of T. F. Tuohy, A. H. Shea, W. H. Crowley, R. B. McCann, and John Grogan. The association has been very active since the last strike and now has an agreement with the union that the men will not go on strike nor will there be any lockouts until the troubles have first been taken up with the grievance committee. This committee consists of Thomas Devine, M. L. Schmitt and W. H. Crowley.

The association has fifteen active

P&S

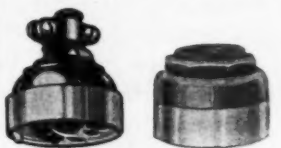
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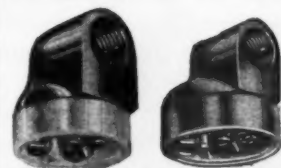
P&S No. PF

P&S No. PC



P&S No. PY

P&S No. PW



P&S No. PO

P&S No. PR



P&S No. S-26

P&S No. S-39
ShurlokP&S No. S-38
Shurlok

P&S No. S-47

P&S No. S-27

P&S No. S-57
Shurlok

P&S No. PH



P&S No. PK



P&S No. PL



P&S No. PI



P&S No. PN

P&S PORCELAIN INTERCHANGEABLE SOCKETS

SINGLE CENTER SCREW TYPE

P&S DECORATIVE SETS

P&S Outdoor Decorative Lighting Sets have become very popular and are used extensively in decorating porches, doorways, hedges, shrubbery, etc.

P&S 2003 is an Intermediate Base Decorative Set in the Multiple Type. This set consists of seven Bakelite Sockets complete with colored genuine Mazda lamps, spaced 20 inches apart. At one end of the string is a P&S connector, which allows for a number of sets to be connected together for continuous decoration. At the other end is an attachment plug cap spaced 6 feet from the nearest socket.

P&S 2000 is equipped with ten Cold Molded Sockets, medium base size, spaced 20-inches apart, with an attachment plug on one end for connecting to the main circuit. Lamps are not supplied with this set.

All P&S Lighting Sets are made so that if one lamp burns out, the rest remain lighted.



P&S No. 2003

THE COMPLETE line of P&S Single Center Screw Porcelain Sockets consists of 10 Socket Bodies, 14 Caps and 6 Bases. Any one of the caps or bases may be used with any one of the 10 socket bodies. The *Interchangeability* of these parts makes it possible for you to carry a complete line of P&S Porcelain Sockets and yet have in stock only a few parts.

Four of the ten socket bodies are equipped with the P&S Shurlok feature for locking the lamp in the socket.

These devices are made of Genuine P&S Porcelain which is known for its quality. Many other characteristic P&S features are built into these sockets. Every part is carefully inspected and tested before shipment.

A sale of this material assures you of a satisfied customer.

Send us the coupon below and we will send you a copy of our No. 29 Catalog which will give you detailed information regarding our complete line of Porcelain and Electrical Supplies.

PASS & SEYMOUR, Inc.

Solvay Station, Syracuse, N. Y.

New York
71-73 Murray St.

Philadelphia
2401 Chestnut St.

Chicago
605 W. Washington Blvd.

MAIL
THE
COUPON

Pass & Seymour, Inc.
Solvay Station
Syracuse, New York

Please mail to the address given below a copy of your Catalog No 29.

Name.....

Street.....

City..... State.....

-as easy
as-



To "Brush Service" Single Phase Motors - - -

This handy Ohio No. 35 Brush Kit makes brush replacement service of single phase motors a quick and profitable job.

Every brush is numbered according to type—each type of brush is in a separate compartment—and a concise simplified chart immediately tells you the exact type of brush to use in single phase motors such as Wagner, Century, Peerless, Westinghouse and G.E.

Send for this Kit. It's handy for the service call—gives you an immediate source of supply.

Ohio Carbon Kit No. 35

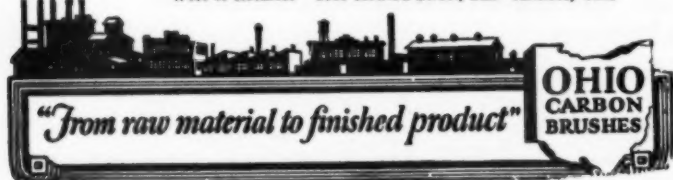
Price \$25.00

The Ohio Carbon Co.

12508 Berea Road

Cleveland, Ohio

West of Rockies: 1066 Howard Street, San Francisco, Calif



members and is working constantly to improve trade conditions and eliminate bad practices in the industry. A meeting has been held with the jobbers in Springfield and another meeting is called to discuss ways and means of bettering existing methods of business. A plan is under way to educate architects and the association is adopting a new set of by-laws. A meeting is held each week at which these important subjects are discussed.

* * *

Faulty Wiring Cause of Fires

The city inspection department of Minneapolis reports that in 1928 thirty-eight fires were caused by defective electrical wiring. Eleven fires were caused by defective switches or tampered fuse cabinets; 29 fires by overheated flat irons; 4 fires from other appliance causes and 41 fires from short circuits from extension cords.

The inspection department has seventeen inspectors now working on reinspections. The inspector tags and reports his findings to the fire marshal's office where the report is held active until the correction has been made and reported. Twenty per cent of the reinspections come under the classification of "faulty wiring."



WIRES FIRST RED SEAL HOME IN SALT LAKE:—F. H. Eardley, former electrageist executive committeeman, secured the contract for wiring the first Red Seal home in Salt Lake City, Utah.

New! Profits for Electrical Contractors

USALITE

DOUBLE OUTLET WALL RECEPTACLE
Approved by the Underwriters' Laboratories

DUPLEX

most convenient and easiest receptacle on the market today to install

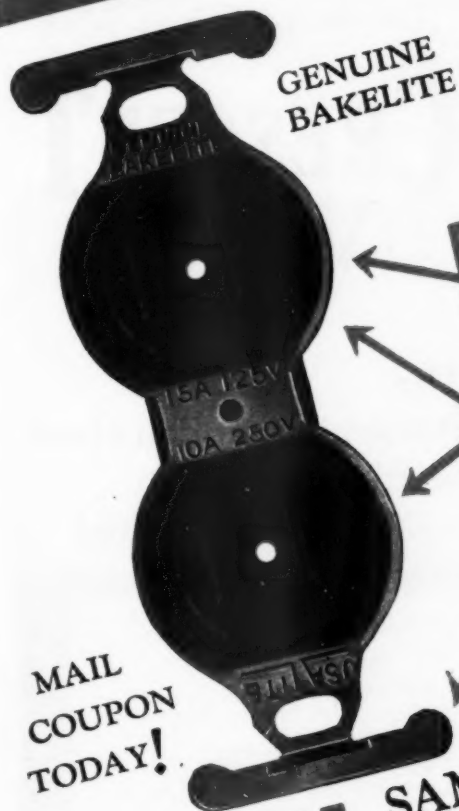
Your chances for getting new business and making more profits are greatly enhanced by the new Usalite double outlet wall receptacle—and in addition there are the latest approved types of outlet and appliance plugs to complete the work. Write today for free sample of the new USALITE (genuine bakelite) Duplex Receptacle and be convinced.

Eliminates Soldering and Wire Connectors

Extra screws for splicing wires—make soldering, twisting and wire connectors absolutely unnecessary. Think of the saving in time and material! Plaster ears make alignment exact.

Easy Arrangement of Wires in Outlet Box

Extreme shallow depth provides easy arrangement of wires in box and genuine bakelite assures a durable polished face. Blade entrances are polarized to accommodate polarized plugs. Screws are staked. You cannot lose them. Get the free sample today.



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FREE! SAMPLE TO EVERY CONTRACTOR

United States Electric Mfg. Corp.
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New York City.

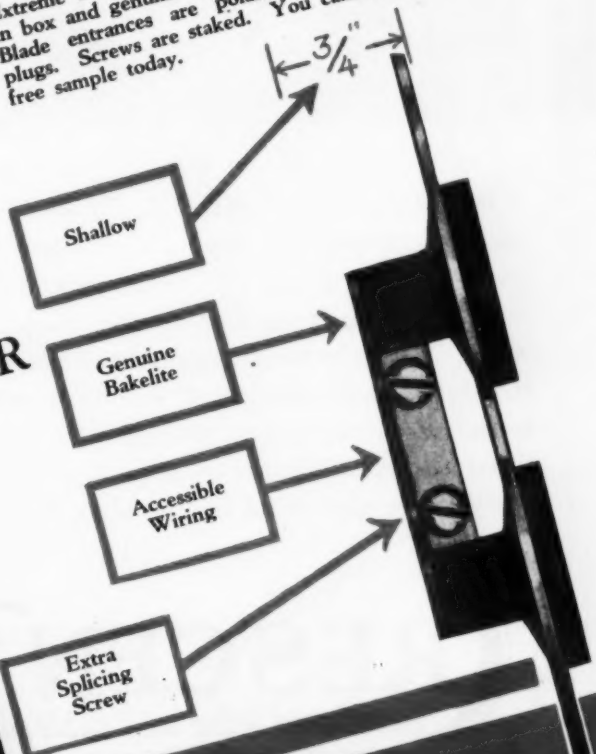
Gentlemen: Please send me at once, without obligation on my part, FREE sample of the new USALITE DUPLEX receptacle.

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*Fine New Buildings
Are Being Wired With*

CRESCENT WIRE

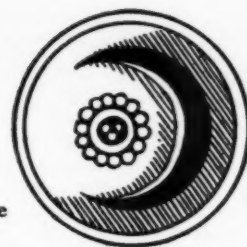
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Gardner Gwinn Inc.,
Hoge Bldg., Seattle, Wash.

Elec. Contractor:
City Elec. & Fixture Co.,
216 James St., Seattle, Wash.



Trade

Mark

Suggested RESALE PRICES *for* Wiring Supplies

The prices listed on the following pages are merely suggested resale prices for the commonly used standard supplies and equipment employed in electrical construction work. They are based on average current trade costs throughout the country, very largely obtained from jobbers' price sheets, and are also based on average overhead charges.

* * *

Obviously, prices can be suggested only for the widely used products that are nationally distributed, and under no circumstances is this section intended to function as a directory of products or manufacturers.

* * *

The publishers wish to again emphasize that these are merely *suggested* resale prices and while every effort is made to make them universally applicable and accurate we cannot guarantee them or assume any responsibility for errors.

* * *

The prices appearing in this section will be completely revised each month as trade prices may change.

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Suggested Resale Prices for Wiring Supplies

These are merely suggested resale prices for the commonly used products that appear regularly on jobber price lists. They are figured on generally accepted principles for computing resale prices and should cover average conditions but are not guaranteed. (See note on title page.)

A-SUNDRIES

| ASBESTOS | | | | | |
|--|-----------------|----------------------------|--------------------|---------------------|-----------------------------|
| Asbestos Millboard—Per Pound—25c. | | | | | |
| ANNUNCIATORS | | | | | |
| House Type | | | | | |
| No. Drops | Edwards 81 Disc | Edwards No. 91 White Enam. | Ansonia 301 to 309 | P & W "Competition" | P & W "Automatic" Guarantee |
| 2 Drop | \$10.00 | \$13.20 | ..... | ..... | ..... |
| 4 " | 11.75 | 15.00 | \$10.00 | \$13.40 | \$16.60 |
| 6 " | 13.25 | 16.75 | 11.00 | 16.75 | 20.00 |
| 8 " | 16.75 | 19.75 | 15.00 | 20.00 | 25.20 |
| 10 " | 19.75 | 23.10 | 17.00 | 23.40 | 30.00 |
| 12 " | 23.00 | 26.50 | 19.50 | 28.25 | ..... |
| 14 " | 26.50 | 29.75 | 22.70 | 34.75 | ..... |
| 16 " | ..... | ..... | 25.25 | ..... | ..... |
| 18 " | ..... | ..... | 28.00 | ..... | ..... |
| Ex. Drops ea. | 2.25 | 3.00 | ..... | ..... | ..... |
| (All other Annunciators—Sell at List less 10%) | | | | | |

COUCH

| Style D Flush Type Wood Face | | Style F Flush Wood Face | | Style F Flush Metal Face | |
|---|--------------|-------------------------|--------------|--------------------------|--------------|
| Number of Drops | Number Price | Number Price | Number Price | Number Price | Number Price |
| 4 | DA 4 \$21.50 | FA 4 \$44.80 | FA 4 \$49.80 | FA 4 \$49.80 | FA 4 \$49.80 |
| 6 | DA 6 26.50 | FA 6 49.30 | FA 6 55.00 | FA 6 55.00 | FA 6 55.00 |
| 8 | DA 8 31.50 | FA 8 53.80 | FA 8 59.70 | FA 8 59.70 | FA 8 59.70 |
| 10 | DA 10 36.50 | FA 10 58.25 | FA 10 64.70 | FA 10 64.70 | FA 10 64.70 |
| 12 | DA 12 43.10 | FA 12 64.25 | FA 12 71.30 | FA 12 71.30 | FA 12 71.30 |
| 15 | DA 15 56.50 | FA 15 73.10 | FA 15 81.50 | FA 15 81.50 | FA 15 81.50 |
| 16 | DA 16 56.50 | FA 20 88.15 | FA 20 98.00 | FA 20 98.00 | FA 20 98.00 |
| 20 | DA 20 69.75 | FA 20 88.15 | FA 20 98.00 | FA 20 98.00 | FA 20 98.00 |
| Add for each drop on any of above—\$4.15 per drop | | | | | |

ADAPTORS—REDUCERS For Sockets

| | Bryant Benjamin | G. E. | Hubbell | Weber | Price |
|-----------------------------|-----------------|-------|---------|-------|--------|
| Medium to Candelabra.... | 392 | 35699 | 392 | 392 | \$.25 |
| " " Miniature.... | 391 | ..... | ..... | ..... | .20 |
| " " Mogul.... | 421 | 98 | 070 | 292 | .50 |
| " " Parallel Blades KF | 1006 | 682 | ..... | ..... | .30 |
| " " Intermediate.... | 9691 | 2644 | 492 | ..... | .25 |
| T Slot " Parallel Blades KL | ..... | 1684 | 6771 | ..... | .50 |
| " " " Parallel Blades | ..... | 6772 | ..... | ..... | .50 |

SOCKET EXTENSIONS

| | |
|---|--------|
| Benjamin No. 91 Socket Extension—Ea..... | \$.40 |
| No. 119 Socket Extension for New Type A Mazda Lamps—Ea..... | .15 |

ATTACHMENTS FOR PULL SOCKETS

| | |
|--|--------|
| For 8" to 14" Reflectors No. 5828—5829—5957—5958..... | \$.55 |
| For 16" to 20" Reflectors No. 5953—5954—5959—5960..... | .60 |

ADJUSTERS For Cords

| | Price |
|--|--------|
| Universal Cord Adjuster Standard No. 1417 3 1/4" Long..... | \$.10 |
| " " " Factory No. 1418 5 1/4" Long..... | .20 |
| " " " Reinforced No. 1419 5 1/4" Long..... | .22 |
| Ball Type No. 1403 & 5 for Type C Cord..... | .08 |
| " " " No. 4634 & 5 for Reinforced Cord..... | .10 |

ACORNS

| | |
|---|--------|
| Hubbell No. 5919 Acorn Adjustable for Linen Cord..... | \$.10 |
| " No. 6982 " Standard for Pull Sockets..... | .10 |
| " No. 7004 " Candelabra Detachable..... | .10 |
| " No. 7015 or Bryant 750 Luminous Acorn..... | .30 |
| " No. 3946 Tassel Acorn..... | .10 |

BOXES, SWITCH

STANDARD SWITCH BOXES

| Description | Depth | Gem Nos. or Similar | Price Each Black | Price Each Galvd. |
|--|----------------|---------------------|------------------|-------------------|
| For Loom Without Clamps..... | 2 & 2 1/4" | A-C-D-E & S | \$.20 | \$.22 |
| " " " With 2 Loom Clamps..... | 2 1/4" | F | .15 | .17 |
| For Metallic Cable with Clamps..... | 2 & 2 1/4" | X & XS | .20 | .23 |
| For Rigid Conduit with't Clamps | 2-2 1/4-2 3/4" | B-BM & BS | .20 | .22 |
| " " " " " " " " | 1 1/4" | R | .22 | .25 |
| " " " " " " " " | 3 1/4" | BD | .34 | .37 |
| Spacers—For Spacer for any box deduct from box price | | | .04 | .05 |

BRACKET SWITCH BOXES

| Gem or Similar | Depth | Gem Nos. or Similar | Price Each Black | Price Each Galvd. |
|--|------------|---------------------|------------------|-------------------|
| For Loom, Lath Supports—No Clps. | 2 1/4" | FB | \$.25 | \$.30 |
| For Loom, Lath Supports—with Clps. | 2 1/4" | FCB | .28 | .33 |
| For Metallic Cable, Lath Supports with Clamps..... | 2 & 2 1/4" | XB & XSB | .34 | .39 |
| For Rigid Conduit, Lath Supports No Clamps..... | 2 & 2 1/4" | BB & BSB | .30 | .35 |

LOCKTITE SWITCH BOXES

| Gem or Similar | Depth | Gem Nos. or Similar | Price Each Black | Price Each Galvd. |
|--|------------|---------------------|------------------|-------------------|
| For Loom with Mtg. Ears without Clamps..... | 2 1/4" | FT | \$.24 | \$.29 |
| For Loom with Mtg. Ears & Clps. | 2 1/4" | FCT | .27 | .32 |
| For Metallic Cable, Mtg. Ears & Clamps..... | 2 & 2 1/4" | XT-XCT-XST | .33 | .38 |
| For Rigid Conduit, Mtg. Ears without Clamps..... | 2 & 2 1/4" | BT-BST | .29 | .34 |

SECTIONAL SWITCH BOXES

| Union or Similar | Boxes Black Galvd. | Spacers Black Galvd. |
|--|--------------------|----------------------|
| For Loom or Rigid Conduit 1 1/4" Deep No. 170..... | \$.24 | \$.27 |
| For Rigid Conduit 2 1/4" Deep—2 Gang No. 160..... | .87 | .95 |
| | .37 | .40 |

SOLID DRAWN SWITCH BOXES

| Union or Similar | Single | 2 Gang | 3 Gang |
|---|--------|--------|--------|
| Solid Drawn for Loom 2 1/4" Deep Type SS Black..... | \$.16 | \$.31 | \$.46 |
| " " " Rigid Conduit No. 180-181-187-Galv..... | .26 | ..... | ..... |
| " " " with Lath Support, 181-BB-GALV..... | .26 | ..... | ..... |

TANDEM SWITCH BOXES

| Loom, Cable, Conduit | 2 Gang | 3 Gang | 4 Gang | 2 Gang | 3 Gang | 4 Gang |
|-------------------------------|--------|---------|---------|--------|---------|---------|
| Tandem Boxes 1 1/4" & 2" Deep | \$.68 | \$ 1.10 | \$ 1.63 | \$.82 | \$ 1.24 | \$ 1.90 |
| " " " 2 1/4" & 2 3/4" " " | .81 | 1.23 | 1.90 | .95 | 1.37 | 2.18 |

DOOR SWITCH BOXES

| Union No. DS-1-3 & 5 | Black | Galvd. |
|--|--------|--------|
| Appleton 7010-12-14 without Clamps | \$.52 | \$.62 |
| " No. DS-2-4 & 6 " 7011-13-15 with Clamps... | .62 | .72 |

LAUNDRY BOX

| Gem or Appleton—with Receptacle..... | Single | Double |
|--------------------------------------|---------|---------|
| | \$ 1.00 | \$ 1.40 |

SWITCH BOX SUPPORTS

| Any Make..... | Each |
|-------------------------------------|--------|
| For Concrete Boxes See Page PL-5. | \$.20 |
| For Solid Gang Boxes See Page PL-5. | ..... |

BOXES & COVERS, OUTLET

BOXES, OCTAGON & SQUARE

| Covers Priced Separately | | Depth | | Knockouts | | Price Each | |
|--------------------------|----------------------|-----------|----------|-----------|--------|------------|--|
| Univ. No. | Size | Bottom | Side | Black | Galvd. | | |
| 24151 | 3 1/4" Oct. Deep | 1 1/4" KO | 1-1 1/4" | 4-1 1/4" | \$.14 | \$.16 | |
| 24151 | 3 1/4" " " " | 1 1/4" KO | 1-1 1/4" | 4-1 1/4" | .16 | .18 | |
| 24155 | 3 1/4" " " " | 1 1/4" KO | 7-1 1/4" | 8-1 1/4" | .16 | .18 | |
| 26121 | 3 1/4" Round Shallow | 1 1/4" KO | 2-1 1/4" | 4-1 1/4" | .15 | .17 | |
| 26125 | 3 1/4" " " " | 1 1/4" KO | 9-1 1/4" | 10-1 1/4" | .14 | .16 | |
| 26126 | 3 1/4" " " " | 1 1/4" KO | 9-1 1/4" | 10-1 1/4" | .13 | .15 | |
| 36113 | 3 1/4" " " " No Ears | 1 1/4" KO | 9-1 1/4" | 10-1 1/4" | .14 | .16 | |
| 36114 | 3 1/4" " " " | 1 1/4" KO | 9-1 1/4" | 10-1 1/4" | .12 | .14 | |
| 36115 | 3 1/4" " " " | 1 1/4" KO | 7-1 1/4" | 8-1 1/4" | .14 | .16 | |
| 36116 | 3 1/4" " " " | 1 1/4" KO | 8-1 1/4" | 10-1 1/4" | .12 | .14 | |
| 51151 | 4" Sq. Deep | 1 1/4" KO | 5-1 1/4" | 8-1 1/4" | .22 | .25 | |
| 52151 | 4" " " " | 1 1/4" KO | 5-1 1/4" | 10-1 1/4" | .20 | .24 | |
| 52151 | 4" Oct. " " | 1 1/4" KO | 5-1 1/4" | 10-1 1/4" | .22 | .26 | |
| 54151 | 4" " " " | 1 1/4" KO | 5-1 1/4" | 10-1 1/4" | .17 | .20 | |
| 54151 | 4" " " " | 1 1/4" KO | 5-1 1/4" | 5-1 1/4" | .20 | .23 | |
| 54155 | 4" " " " | 1 1/4" KO | 9-1 1/4" | 8-1 1/4" | .25 | .28 | |
| 54171 | 4" " " " | 1 1/4" KO | 5-1 1/4" | 4-1 1/4" | .30 | .35 | |
| 56111 | 4" Round Shallow | 1 1/4" KO | 5-1 1/4" | 5-1 1/4" | .13 | .15 | |
| 56111 | 4" " " " | 1 1/4" KO | 4-1 1/4" | 4-1 1/4" | .16 | .20 | |
| 56112 | 4" " " " | 1 1/4" KO | 4-1 1/4" | 4-1 1/4" | .10 | .12 | |
| 56115 | 4" " " " | 1 1/4" KO | 9-1 1/4" | 9-1 1/4" | .14 | .16 | |
| 56116 | 4" " " " | 1 1/4" KO | 9-1 1/4" | 9-1 1/4" | .11 | .13 | |
| 56121 | 4" " " " | 1 1/4" KO | 5-1 1/4" | 5-1 1/4" | .17 | .20 | |
| 56122 | 4" " " " | 1 1/4" KO | 5-1 1/4" | 5-1 1/4" | .13 | .16 | |
| 56125 | 4" " " " | 1 1/4" KO | 9-1 1/4" | 9-1 1/4" | .32 | .37 | |
| 72151 | 4-11/16" Sq. Deep | 1 1/4" KO | 5-1 1/4" | 8-1 1/4" | ..... | .55 | |
| 72171 | 4-11/16" " " " | 2 1/4" KO | 5-1 1/4" | 8-1 1/4" | ..... | .65 | |

COVERS, ROUND
For 3¼" & 4" Octagon & Round Boxes

| Universal No. | Size | Description | Price Each | |
|------------------|--------|---|------------|--------|
| | | | Black | Galvd. |
| 24C-1 | 3 1/4" | Flat Closed Cover Blank 3 1/4" | \$.06 | .08 |
| 24C-2 | " | Raised 3/4" Closed Cover Blank..... | .06 | .08 |
| 24C-6 | " | Flat with 1/2" KO | .07 | .09 |
| 24C-7 | " | Raised 3/4" KO | .08 | .10 |
| 24C-12 | " | Raised 3/4" Hole for Cord or Bush.. | .08 | .10 |
| 24C-28 | " | Spider Flat for Surf. Mntd. Devices.. | .10 | .12 |
| 24C-31 | " | Raised 3/4" Opgng. for Sign Recep.... | .08 | .11 |
| 24C-33 | " | Flat Opng. 3/4" for Spec. Sign Recep.. | .23 | .25 |
| 24C-35 & 36 | " | Raised Opng. 3/4" for Scrw Sign Recep.. | .08 | .10 |
| 54C-1 | 4" | Flat Closed Cover..... | .08 | .10 |
| 54C-2 | " | Raised 3/4" Closed Center..... | .08 | .11 |
| 54C-3 | " | Raised 3/4" Opening 2 1/2"..... | .11 | .13 |
| 54C-6 | " | Flat with 1 1/2" KO..... | .08 | .11 |
| 54C-7 | " | Raised 3/4" with 3/4" KO..... | .10 | .12 |
| 54C-12 | " | Raised with Opening for Cord..... | .09 | .11 |
| 54C-28 | " | Flat for Surface Mounted Devices... | .10 | .12 |
| 54C-31 | " | Raised for Sign Receptacles..... | .10 | .12 |
| 54C-35 & 36 | " | " " " " " " | .10 | .12 |
| 1173 | 3 1/4" | Porc. Round Cov. for 3 1/4" Box with hole\$.20 | | |
| 1178 | 4" | Porc. Round Cov. for 4" Box with hole \$.30 | | |

COVERS, SQUARE
For 4" & 4-11/16" Square Boxes

[illegible]

For Exposed Work

| Universal No. | Description | Price Black | Galvd. |
|-----------------|--|-------------|--------|
| N-8490 to 8493 | 4 [#] Cover For One Push or Toggle Switch or one Single or Duplex Receptacle. | \$.25 | \$.30 |
| N-8493A to 8500 | 4 [#] Cover For Two Push or Toggle Switches or Two Receptacles or any combination of two devices. | \$.35 | \$.40 |

EXTENSION RINGS

For Flush Devices

| Universal No. | Description | Price Each | |
|------------------|---|------------|--------|
| | | Black | Galvd. |
| 25151-57151 | 3 1/4" Octagon Ring-1 1/2" Deep..... | \$.27 | \$.29 |
| 53151-55151 | 4" Square or Octagon Ring-1 1/2" Deep.... | .30 | .32 |
| 55171 | 4" Octagon Ring-2 1/4" Deep..... | .48 | .54 |

HANDY OR UTILITY BOXES & COVERS

| Univ. No. | Appleton No. | G. E. No. | Description | Black or Galvd. Price |
|--------------|-----------------|--------------|--------------------------------|--------------------------|
| 58361 | 4-CS | 58361 | Box 4 x 2½ x 1½ Approx. Size | \$.25 |
| 58361 | 3-OS | 3400 | " 3½ x 2¼ x 1½ " " | .30 |
| 58151 | 4-SS | ..... | " 4 x 1½ x 1½ " " | .30 |
| 58371 | 4-SSL | ..... | " 4 x 2¼ x 2¼ " " | .30 |
| 58371 | 4-SSLD | ..... | " 4 x 2¼ x 2¼ " " | .55 |
| 58C1 | 2540 | 34R1 | Cover Flat Steel Closed | .13 |
| 58C11 | 2541 to 4 | ..... | " " Porcelain 1-2-3-4 Hole | .18 |
| 58C28 | 2550 to 53 | ..... | " " Steel with ¼ or ⅜ Nip. | .30 |
| 58C36 | 2556 | ..... | " " For Snap Switches | .20 |
| 58R3 | 2557-8 | ..... | " " Sign Receptacles | .25 |
| 58R3 | 2537 | 34R3 | Cover For Push Button Switches | .25 |
| 58R5 | 2539 | 34R5 | " " Single Receptacles | .25 |
| 58R7 | 2510 | 34R7 | " " Duplex Receptacles | .25 |
| 58R7 | 2594 | 34R14-15 | " " Toggle or Tumbler Switch | .25 |

CONCRETE BOXES WITH COVERS

| Depth | 1½" | 2" | 2½" | 3" | 3½" | 4" | 5" | 6" |
|----------------------------|--------|--------|--------|--------|--------|--------|--------|--------|
| Complete with Plate & Stud | \$.35 | \$.40 | \$.40 | \$.45 | \$.50 | \$.55 | \$.60 | \$.70 |
| less " " " | .30 | .35 | .35 | .40 | .45 | .50 | .55 | .65 |

SOLID GANG BOXES & COVERS

| | | | | | | | |
|--------------|--------|--------|--------|--------|--------|--------|--------|
| Galvd. Only | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
| | Gang | Gang | Gang | Gang | Gang | Gang | Gang |
| Box Price... | \$1.80 | \$1.20 | \$1.65 | \$2.10 | \$4.00 | \$6.35 | \$6.50 |
| Cover " | .40 | .60 | .80 | 1.00 | 2.00 | 3.35 | 3.70 |

BOXES, OUTLET

ARMORED CABLE BOXES

| Comparative Numbers | | | | | | | | Galvd. |
|---------------------------|--|--------|----------|---------------|----------|-----------------|------------|--------|
| Size | Stud | Clamps | Bush Pl. | Union Chicago | Appleton | Nat. Met. Prod. | Steel City | Price |
| 3 1/4" Round | Yes | Two | No | ..... | ..... | 2365 | | \$.30 |
| 3 1/4" " " | " | " | Two | ..... | 544L | 2355 | 36151XS | .35 |
| 3 1/4" Oct. | " | " | " | 1288XS | ..... | ..... | 24151XS | .35 |
| 3 1/2" Round | No | " | " | 1286 | ..... | ..... |  | .20 |
| 3 1/2" " " | Yes | " | Two | 1287XS | 532L | ..... | 36125XS | .30 |
| 3 1/2" Oct. | " | " | " | ..... | 530L | ..... |  | .30 |
| 4 1/4" " " | " | " | " | 1291XS | ..... | 2345 | 54151XS | .40 |
| 4 1/4" Oct. | No | " | " | 1291X | 542L | 2348 | 54151X | .35 |
| Hope | | | | | | | | |
| Boxes No. 2-4-12-14 | Straight Electric or Combination Each..... | | | | | | | \$.20 |
| G. E. | | | | | | | | |
| Boxed | 5200 & 5201 | " | " | " | " | " | " | .20 |
| Thomas & Betts | | | | | | | | |
| No. 565-66-67-68 | Standard Cable Box..... | | | | | | | .20 |
| No. 553-54-55-56-57 | Dead Ground Type..... | | | | | | | .30 |

BAR HANGERS FOR OUTLET BOXES

Without Boxes

| (With 3/4 Fixt. Stud) | Appleton | Austin | G.E. | Hemco | Steel City | Union Chgo. | Price |
|---------------------------|----------|--------|------|-------|------------|-------------|--------|
| Straight 18" Bar | SBH | 900 | 6600 | 20 | 6000 | 10 | \$.25 |
| Straight 24" Bar | SBHL | 900A | 6601 | 24 | 6000 | 10A | .35 |
| Shallow 19 1/2 Offset Bar | BHS | 905 | 6602 | 21 | 6001 | 11 | .30 |
| Shallow 24" Offset Bar | BHSL | .. | .. | .. | .. | .. | .35 |
| Deep 19 1/2 Offset Bar | BHD | 915 | 6603 | 22 | 6002 | 12 | .30 |
| Deep 24" Offset Bar | BHDL | .. | .. | .. | .. | .. | .35 |
| Universal Old Workbar | BHOW | .. | .. | .. | 6005 | .. | .35 |
| Universal Box Cleat | CBH | 910 | 6605 | 24 | 6005 | 14 | .15 |
| Straight Saddle Bar 18" | XBH | .. | .. | .. | .. | .. | .20 |

BAR SETS

Complete with Boxes

| Complete with | | | | | Bush | Steel | Price |
|---------------|------------|------|--------|--------|----------|---------|--------|
| For | Size | Ears | Clamps | Plates | Appleton | City | Galvd. |
| Loom | 3½x½ Round | None | None | None | 498L | 36116B | \$.35 |
| " | " " " | " | Two | " | 498LC | 36116BC | .40 |
| " | " " " | Yes | None | " | 521L | 36115B | .40 |
| " | " " " | " | Two | " | 521LC | 36115BC | .45 |
| Cable | 3½x½ | None | " | " | ..... | ..... | .35 |
| " | 3½x½ | " | " | Two | 532L | ..... | .40 |
| " | 3½x½ | Yes | " | None | ..... | ..... | .45 |
| " | 3½x1½ Oct. | " | " | Two | 539L | ..... | .50 |
| " | " " " | " | " | None | ..... | ..... | .50 |
| " | 4x1½ | " | " | " | 545L | ..... | .55 |
| Conduit | 4x½ Round | None | None | None | BH4C | 56112B | .35 |
| " | " " " | Yes | " | " | BH4CL | 56111B | .40 |

| For | Size | Ears | Clamps | Bush | Union | Price |
|---------|------------|------|--------|--------|---------|--------|
| Loom | 3½x½ Round | None | None | Plates | Chicago | Galvd. |
| " | " " " | " | Two | None | 260B | \$.35 |
| " | " " " | Yes | None | " | 260CB | .40 |
| " | " " " | " | Two | " | 261B | .40 |
| " | " " " | " | Two | " | 261CB | .45 |
| Cable | 3½x½ | None | " | " | 1286B | .35 |
| " | 3½x½ | " | " | Two | 1287 XB | .40 |
| " | 3½x½ | Yes | " | None | 1289 B | .45 |
| " | 3½x1½ Oct. | " | " | Two | 1289 XB | .50 |
| " | " " " | " | " | None | 1290 B | .50 |
| " | 4x1½ | " | " | Two | 1290 XB | .55 |
| Conduit | 4x½ Round | None | None | None | 109B | .35 |
| " | " " " | Yes | " | " | 109LB | .40 |

BUSHINGS & LOCKNUTS

BUSHINGS & LOCKNUTS

For Rigid Conduit

| | | | | | | |
|--------------------|--------|--------|--------|--------|---------|---------|
| Locknuts—Each..... | 1½" | 2" | 2½" | 3" | 3½" | 4" |
| Bushings—Each..... | 1½" | 2" | 2½" | 3" | 3½" | 4" |
| Locknuts—Each..... | \$.01 | \$.02 | \$.03 | \$.04 | \$.05 | \$.06 |
| Bushings—Each..... | \$.01 | \$.02 | \$.03 | \$.04 | \$.05 | \$.06 |
| Locknuts—Each..... | \$.10 | \$.13 | \$.22 | \$.38 | \$.50 | \$.65 |
| Bushings—Each..... | \$.13 | \$.23 | \$.34 | \$.50 | \$ 1.00 | \$ 1.60 |

PORCELAIN CLAMP BUSHINGS

"Federal" or Equivalent

| No. | K. O. | Inside Size | Outside Size | Wire Size | Bushing Each | Extra Ring Each |
|---------|--------|----------------|-----------------|--------------|-----------------|--------------------|
| A-1 | 1 1/2" | 1 1/2" | 1 1/2" | No. 10 | \$.08 | \$.04 |
| A-1 1/2 | 1 3/4" | 1 3/4" | 1 3/4" | No. 10 | .10 | .04 |
| A-2 | 1 1/2" | 1 1/2" | 1 1/2" | No. 8 | .10 | .04 |
| A-3 | 1 1/2" | 1 1/2" | 1 1/2" | No. 3 | .12 | .05 |
| A-4 | 1 1/2" | 1 1/2" | 1 1/2" | No. 00 | .16 | .07 |
| A-5 | 1 1/2" | 1 1/2" | 1 1/2" | 450 CM | .23 | .10 |
| A-6 | 2" | 1 1/2" | 2 1/4" | 1 Mill. CM | .46 | .12 |
| B-1 | 1 1/2" | 1 1/2" | 1 1/2" | No. 10 | .21 | .04 |
| K-1 | 1 1/2" | 1 1/2" | 1 1/2" | No. 10 | .32 | .04 |
| K-2 | 1 1/2" | 1 1/2" | 1 1/2" | No. 8 | .37 | .05 |

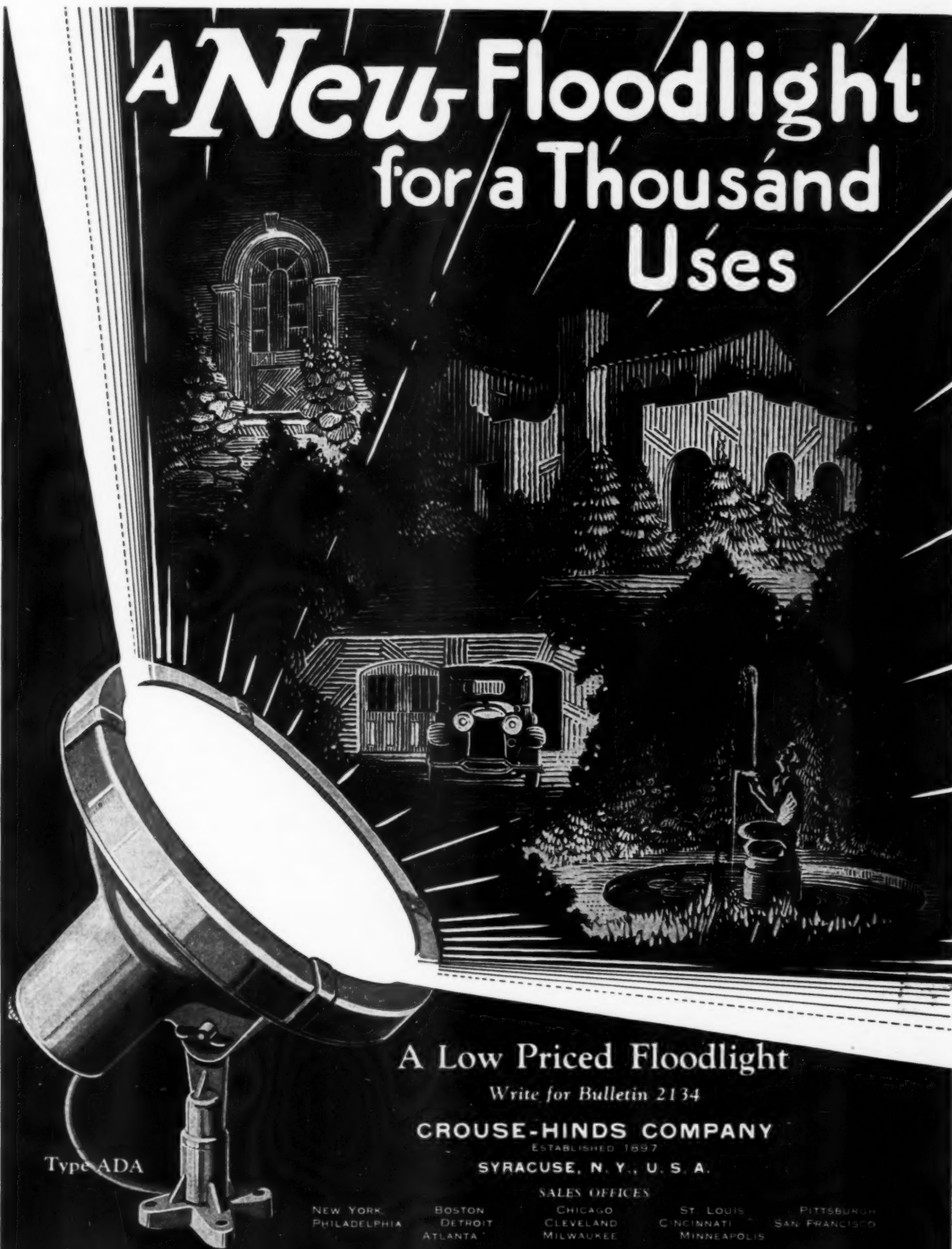
"MULTI" PORCELAIN CLAMP BUSHINGS

| No. | Inside Size | Outside Size | For Wires | Price Each Complete |
|-----|-----------------|-----------------|-----------|------------------------|
| 10 | $\frac{9}{16}$ | $\frac{41}{16}$ | 14 B & S | \$0.08 |
| 12 | $\frac{7}{8}$ | $\frac{41}{16}$ | 14 B & S | .12 |
| 15 | $\frac{7}{8}$ | $\frac{13}{8}$ | 14 B & S | .10 |
| 20 | $\frac{7}{8}$ | $\frac{13}{8}$ | 6 B & S | .10 |
| 30 | $\frac{9}{8}$ | 1 | 2 B & S | .12 |
| 40 | $\frac{9}{8}$ | 1 $\frac{5}{8}$ | 000 | .20 |
| 50 | 1 $\frac{1}{2}$ | 1 $\frac{9}{8}$ | 350 000 | .30 |
| 55 | 1 $\frac{1}{2}$ | 1 $\frac{7}{8}$ | 600 000 | .38 |
| 60 | 1 $\frac{5}{8}$ | 2 $\frac{5}{8}$ | 1,000,000 | .45 |

PORCELAIN NO CLAMP BUSHINGS
Multi- With Spring Clip, Not Threaded

| | | | | | | |
|--------------|-------|--------|--------|--------|--------|--------|
| Catalog No. | Multi | 90A | 90B | 91 | 92A | 92B |
| Size of Hole | | 1/8" | 13/16" | 13/16" | 11/16" | 17/16" |
| To Fit Hole | | 1/8" | 1/8" | 5/8" | 13/16" | 15/16" |
| Price | | \$.06 | \$.06 | \$.06 | \$.07 | \$.07 |

A New Floodlight for a Thousand Uses



A Low Priced Floodlight

Write for Bulletin 2134

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CH 462

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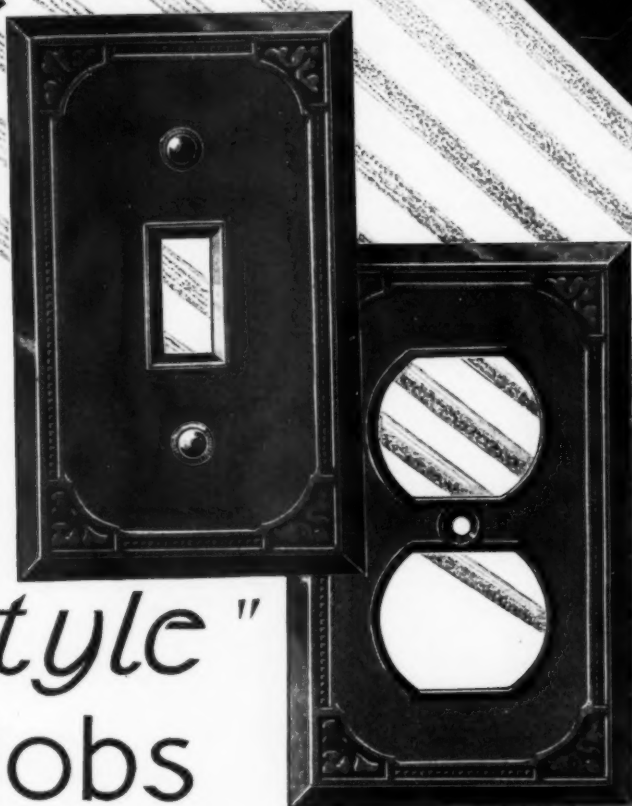
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H&H MOLDED HEGEMITE PLATES



They "Style" your jobs *in the modern manner*

Here you put the finishing touches on fine installations. HEGEMITE Plates put style where it's seen; quality where it shows. They're the badge of Distinction for jobs you've wired modernly—and want it noticed!

Rich, lustrous brown with vertical-ribbed surface. Art borders with polished edges. Decorative *showpieces* on the walls! Designed to dress up any job from modest home to luxurious offices or apartments.

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No. 9021—for Tumbler Switch
No. 9040—for Duplex Receptacle
(Both illustrated above)

No. 9030—for Single Receptacle
No. 9018—for Single Receptacle
and Tumbler Switch

No. 3974—Switch and Receptacle Combination with HEGEMITE Plate
No. 21096—Tumbler Switch (Three switches) with HEGEMITE Plate



NO. 3974

HART & HEGEMAN DIVISION
THE ARROW-HART & HEGEMAN ELECTRIC CO.
HARTFORD, CONN. MAKERS OF ELECTRIC SWITCHES SINCE 1890



NO. 21096

Save \$1⁶⁵ every time you bend big pipe

ELECTRICAL contractors everywhere now find it more profitable to bend big pipe. In fact, there are many advantages with the new Franklin Pipe Bender.

A three inch galvanized elbow and coupling will cost \$2.75 when bought in carload lots and it will cost you at least 50 cents to install. Straight conduit costs 40 cents a foot and material for a three-foot bend will cost \$1.20 with 40 cents figured in for bending and installing. This makes the latter operation cost only \$1.60 as against \$3.25 for the same operation in which an elbow is used. **A saving of \$1.65 on each bend, for you.**

Think of it, only 215 bends pay for the new Franklin Pipe Bender and the rest is all clear profit for you.

One man does the job. The jack is portable and easily moved from one job to another. The bender is sturdy and lasts a lifetime. Consists of an inverted ratchet jack anchored to frame of steel truck. Pipe is placed under shoe and jack is operated to limit of preset gauge giving you the desired bend.

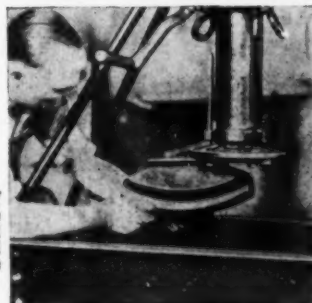
WHITE CITY ELECTRIC CO., 14 N. Franklin St., CHICAGO

TEAR OUT
↓
AND
↓
SEND TO US



Weights only 350 pounds and easily moved from one job to another.

Various sizes of shoes may be easily slipped into the grooved head of the jack.



215 BENDS PAY FOR THE
Franklin
PIPE BENDING JACK

White City Electric Co.
14 North Franklin Street
Chicago, Ill.

Please send full data on your
Franklin Pipe Bending Jack to

Name

Street

City

Man
Interested

Boxes, Floor

Bell Push Buttons, Etc.

| | | | | | | | | | |
|-------------------------------|------|-----------------|-----------------|-----------------|--------|------------------|------------------|-----------------|------------------|
| | Size | $\frac{3}{8}$ " | $\frac{1}{2}$ " | $\frac{3}{4}$ " | 1" | $1\frac{1}{8}$ " | $1\frac{1}{2}$ " | 2" | $2\frac{1}{2}$ " |
| Without Locknut..... | | \$.05 | \$.11 | \$.14 | \$.15 | \$.20 | \$.30 | \$.45 | \$.85 |
| With Locknut..... | | .09 | .15 | .18 | .24 | .30 | .45 | .77 | 1.15 |
| Black Composition..... | | | | | | $\frac{3}{4}$ " | $\frac{1}{2}$ " | $\frac{3}{8}$ " | $\frac{1}{8}$ " |
| For Sockets..... | | | | | | \$.01 | \$.02 | \$.03 | \$.08 |

NON-ADJUSTABLE TYPE

| Full- Steel City Co. | "Lat- man" Mfg. Co. | "Robe" Fullman Mfg. Co. | Russell & Stoll | Description | Price |
|----------------------------|---------------------------|----------------------------------|-----------------------|---|--------|
| 477 | 110 | 2580 | | Comp Out. with Std. Rec. & Bell Nozzle | \$3.90 |
| 490 | 100 | 2590 | | " " Less Std. Rec. with Stem Nozzle | 3.50 |
| 490 | 100 | 2590 | | Comp. Out. Less Std. Rec. less Nozzle | 2.45 |
| 491 | .... | .... |  | Comp. Out. with 20A. Polarz. Rec. & Bell Noz. | 4.90 |
| 499 | 300 | .... |  | Midjet Out. with 10A. Recept. No Nozzle | 2.45 |
| 495 | .... | .... |  | Square Out. Less Recept. with Bell Nozzle | 4.35 |
| 496 | .... | .... |  | Square Out. With 15 Amp. Rec. & Bell Nozzle | 5.40 |
| 497 | .... | .... |  | Sq. Out. With 25 A. Rec. & Large Bell Nozzle | 8.60 |

| | | | | |
|-----|-----|------|--|--------|
| 400 | 120 | 2502 | Complete-Shallow Box—Less Receptacle | \$4.35 |
| 400 | ... | ... | Complete-Deep Box—Less Receptacle | 5.25 |
| 401 | 130 | ... | Complete-Shallow Box With Receptacle | 5.40 |
| 401 | ... | ... | Complete-Deep Box With Receptacle | 6.30 |
| 420 | ... | ... | Complete Large Size Box Without Receptacle | 4.90 |
| 421 | ... | ... | Complete Large Size Box With Receptacle | 6.00 |

| | | | | |
|--|------|------|--|---------|
| 441 | 251 | 2511 | Single Gang with 1/2" Cover Plate..... | \$ 5.40 |
| 442 | 252 | 2512 | Two " " " " | 10.80 |
| 443 | 253 | 2513 | Three " " " " | 16.20 |
| 444 | 254 | 2514 | Four " " " " | 21.60 |
| 445 | | 2515 | Five " " " " | 27.00 |
| Extra For 2" Cover Plate, Per Gang..... | | | | .65 |
| Extra For Special Receptacles Latrobe No. T-208, Each Receptacle.. | | | | 1.00 |

Thomas & Betts

| | | |
|----------|-----------------------------------|--------|
| No. 100 | Complete with Receipts..... | \$4.00 |
| No. 200 | " with Receipts..... | 4.00 |
| No. 1200 | Complete without Receipts..... | 2.70 |
| No. 1100 | Complete with Receipts..... | 9.00 |
| No. 8000 | Utility Outfit with Receipts..... | .85 |

TYPE "A" SURFACE CUTOUT BOXES

| Black | | | | | | | | | |
|--------|------|---------|------|--------|--------|------|------|-------|---------|
| Width. | | Length. | | 3" | | 4" | | 6" | |
| Short | Long | Side | Side | Deep | Deep | Side | Side | Deep | Deep |
| 4½ | 5 | | | \$.55 | ..... | 12 | 18 | ..... | \$ 2.40 |
| 4½ | 9 | | | .60 | ..... | 12 | 24 | ..... | 4.40 |
| 4½ | 9 | 3½" | | .60 | ..... | 12 | 30 | ..... | 11.40 |
| 6 | 6 | | | .65 | \$.75 | 15 | 15 | ..... | 2.75 |
| 6 | 8 | | | .80 | .85 | 15 | 18 | ..... | 3.00 |
| 6 | 9 | | | .70 | .90 | 15 | 24 | ..... | 5.25 |
| 6 | 10 | | | .75 | 1.00 | 15 | 30 | ..... | 12.25 |
| 6 | 12 | | | .80 | 1.05 | 18 | 18 | ..... | 4.40 |
| 6 | 15 | | | .95 | 1.20 | 18 | 21 | ..... | 9.80 |
| 8 | 8 | | | 1.00 | .95 | 18 | 24 | ..... | 12.90 |
| 8 | 10 | | | 1.00 | 1.05 | 18 | 30 | ..... | 13.95 |
| 8 | 12 | | | 1.10 | 1.15 | 18 | 36 | ..... | 16.65 |
| 8 | 15 | | | 1.20 | 1.25 | 18 | 40 | ..... | 17.90 |
| 8 | 18 | | | 1.35 | 1.65 | 24 | 24 | ..... | 14.00 |
| 9 | 9 | | | .95 | 1.75 | 24 | 30 | ..... | 17.55 |
| 9 | 12 | | | 1.05 | 2.00 | 24 | 36 | ..... | 20.50 |
| 10 | 10 | | | 1.10 | 1.30 | 24 | 40 | ..... | 22.30 |
| 10 | 12 | | | 1.35 | 1.55 | 24 | 44 | ..... | 23.90 |
| 10 | 15 | | | 1.50 | 1.65 | 30 | 30 | ..... | 24.95 |
| 10 | 18 | | | 1.60 | 2.25 | 30 | 36 | ..... | 38.10 |
| 12 | 12 | | | 2.10 | 1.90 | 30 | 42 | ..... | 44.80 |
| 12 | 15 | | | 2.20 | 2.10 | 30 | 48 | ..... | 51.95 |

For Galvanized Boxes Add 50% to above prices.

Ansonia

| Name | No. | Description | Buzzer | 2 1/2" Bell | 3" Bell | 4" Bell | Cow or Sleigh |
|---------|-----|------------------------------|--------|-------------|---------|---------|---------------|
| ..... | 656 | Sgle. Coil Non Adjust. | \$.45 | \$.50 | ..... | ..... | ..... |
| ..... | 657 | Dble. Coil Non Adjust. | .50 | .55 | ..... | ..... | ..... |
| ..... | 652 | Dble. Coil Round Non Adjust. | .60 | .65 | ..... | ..... | ..... |
| Wizard | 659 | Dble. Coil Non Adjust. | .90 | .95 | ..... | ..... | ..... |
| Eureka | 641 | Dble. Coil Adjust. Class B. | 1.00 | 1.05 | \$1.25 | \$1.60 | \$1.90 |
| Acme | 631 | Dble. Coil Adjust. Class A. | 1.35 | 1.40 | 1.50 | 1.85 | 2.15 |
| Eureka | 621 | Dble. Wood Box Bell | 1.30 | 1.35 | 1.45 | 1.70 | 1.90 |
| Monitor | 658 | Round Type | ..... | 1.55 | ..... | ..... | ..... |
| Monitor | 661 | Round Type | ..... | 1.55 | ..... | ..... | ..... |
| Wizard | 660 | Comb. Bell & Buzzer | ..... | 1.25 | 1.35 | ..... | ..... |
| Wizard | 655 | Buzzer Oak Mat | 1.75 | ..... | ..... | ..... | ..... |
| Wizard | 666 | Watch Case Buzzer | 1.30 | ..... | ..... | ..... | ..... |
| Ansonia | 663 | Comb. Bell & Buzzer | ..... | 1.00 | 1.10 | ..... | ..... |

Edwards

| Name | No. | Size | Description | Price |
|------------|-----|--------|--|-------|
| Nubel | 735 | 2 1/4" | Two Coil Non-Adjust.-Gray Enam. Bell | \$.65 |
| " | 736 | " | " " " " Buzzer | .60 |
| Dixie | 720 | 2 1/4" | " " Class C-Non-Adjust. Bell | .95 |
| " | 725 | " | " " " " Buzzer | .90 |
| Combelt | 737 | 2 1/4" | Two Coil Non-Adjust.-Gray Enam. Bell & Buzz. | 1.15 |
| Tubell | 738 | " | Dble. Coil Non-Adjust.-Gray Enam. Two Bells | 1.25 |
| Cadet | 710 | 2 1/4" | Two Coil-Class B-Adjust. Bell | 1.05 |
| " | 715 | " | " " " " Buzzer | 1.00 |
| " | 712 | 3" | " " " " Bell | 1.25 |
| " | 714 | 4" | " " " " Bell | 1.60 |
| " | x | " | " " " " Cow or Sleigh | 1.90 |
| Buz-A-Bell | 730 | 2 1/4" | Two-Coil-Class C Comb. Bell & Buzzer | 1.20 |
| Monitor | 156 | 3" | Monitor Bell-Nickel Plated Gong | 1.55 |
| Bronx | 750 | 1 3/4" | Nickel Watch Case Buzzer | 1.30 |

No. 13 Bells

| Size | Price |
|---------------|--------|
| 1" | \$2.00 |
| 1 1/4" | 1.80 |
| 2 1/4" | 1.90 |
| 3" | 2.00 |
| 4" | 2.20 |
| 6" | 0.60 |
| Cow or Sleigh | 2.25 |

| Size | | Price |
|-----------|------------|--------|
| 1½" x 1½" | No. 0..... | \$1.85 |
| 2¼" x 1½" | No. 1..... | 1.60 |
| 2½" x 1½" | No. 2..... | 1.70 |
| 3" x 2" | No. 3..... | 2.00 |
| 3½" x 2½" | No. 4..... | 2.20 |

Iron Box Bells

| | |
|---|--------|
| Small 2½" Iron Box Bell Non-Adjust. Dbble. Magnet..... | \$.75 |
| Fancy Gong Cow or Sleigh Non-Adjust. Dbble. Magnet..... | 1.65 |
| King Monitor Bell..... | 1.65 |
| 6" Large Iron Box Bell for Battery Current..... | 7.30 |
| 8" " " " " " " | 10.50 |

| | |
|--|--------|
| Small Iron Box Buzzer Non-Adjust. Dble. Magnet | \$.75 |
| Watch Case Buzzer Nickeled..... | 1.10 |
| Midget Buzzer Nickeled..... | 1.85 |
| Wood Box Buzzer..... | 2.15 |
| Flush Buzzer with Flush Plate..... | 3.35 |

| Regular Type | | Large Type | |
|-----------------------------|---------|-----------------|---------|
| 2½" Regular..... | \$ 2.20 | 6" Regular..... | \$ 6.55 |
| 3" "..... | 2.30 | 8" "..... | 8.00 |
| 4" "..... | 2.60 | 10" "..... | 13.10 |
| Standard Cow or Dinner..... | 3.10 | 5" Dinner..... | 11.25 |
| 3" Dinner..... | 5.15 | 5" "..... | 13.05 |
| 3" "..... | 8.65 | 6" Cow..... | 13.75 |
| 3" Cow..... | 6.75 | 6" "..... | 16.00 |
| 4" "..... | 10.00 | | |

| Name | No. | Description | Buzzer | 2 1/2" Bell | 3" Bell |
|-------------|--------|------------------------|--------|-------------|---------|
| Competition | 400-1 | Dble. Coil Non-Adjust. | \$.60 | \$.65 | |
| Eclipse | 200-1 | " " " " | .90 | .95 | \$1.05 |
| XXX | 211-18 | " " Adjust. B | 1.00 | 1.05 | 1.25 |
| Marlo | 221-29 | " " " A | 1.65 | 1.70 | 1.85 |
| Eclipse | 208 | Comb. Bell & Buzzer | 1.25 | 1.25 | |
| Competition | 402 | " " " " | 1.25 | 1.15 | |
| Midget | 331-34 | All Nickeled Bell | 1.50 | 1.85 | |
| P. R. | 240 | Watch Case Buzzer | 1.45 | | |
| P. R. | 238 | Monitor | 1.55 | | |

| Name | No. | Description | 4" | Cow or Sleigh |
|-------------|--------|----------------------------|--------|------------------|
| Competition | 400-1 | Dble. Coil Non-Adjust..... | Bell | |
| Eclipse | 200-1 | " " " " | \$1.35 | |
| XXX | 211-18 | " " Adjustable B..... | 1.60 | \$1.90 |
| Marlo | 221-29 | " " A..... | 2.25 | 2.65 |
| Eclipse | 208 | Comb. Bell & Buzzer..... | | |
| Competition | 402 | " " " " | | |
| Midget | 33-34 | All Nickled Bell..... | | |
| P. R. | 240 | Watch Case Buzzer..... | | |
| P. R. | 238 | Monitor..... | | |

| | 2 1/2" | 3" | 4" | Tea |
|--|--------|--------|--------|--------|
| Single Coil Bell No. 31 & 32.... | \$.60 | \$.65 | \$.80 | \$1.50 |
| Two Coil Bell No. 311-321-331. | .55 | .60 | .75 | .95 |
| Combination Bell & Buzzer No. 331..... | | .95 | | |
| Flush Type Buzzer No. 315..... | 1.20 | | | |
| Door Bell 26A or 26D..... | | 1.75 | | |

Any Make

| | 2½" | 3" | 4" | 5" | 6" | 8" | 10" | 12" |
|-------------|--------|--------|--------|--------|---------|---------|---------|---------|
| Class A.... | \$5.75 | \$6.10 | \$7.25 | \$9.40 | \$10.60 | \$16.00 | \$25.00 | \$31.00 |
| " B.... | 5.35 | 5.60 | 6.65 | 7.85 | 8.95 | 14.45 | 21.40 | 27.60 |

BELL PUSH BUTTONS, TREADS, ETC.

Ansonia

| Round Stamped | | Price |
|---------------|-----------------------------|-------|
| E.33 | 1 1/2" Diameter. | .75 |
| 506 | 1 1/2" Diameter Fixed Back. | .30 |
| 507 | With Card Holder. | .50 |
| 513 | 1 1/2" Diam. Loose Back. | .95 |
| 514 | " " " | .45 |
| 515 | " " " | .45 |
| 527 | 2 1/2" " Fixed Back. | .40 |
| 579 | 1 1/2" " 562 Center. | .75 |

ELECTRICAL CONTRACTING

Bell Push Buttons, Etc.

Brackets for Insulators

BELL PUSH BUTTONS, TREADS, ETC.—Continued

| Round Cast | Price |
|---|-------------------------------|
| 508 & 510 | 2 1/2" Diam. \$1.00 |
| 511 | 1 1/2" Loose Back .95 |
| 512 | 2 1/2" " " 1.00 |
| 540 | 2 1/2" " " .60 |
| 550 | 2 1/2" " " .85 |
| 570 | 2 1/2" " " .75 |
| Other Ansonia Push Buttons, Etc. | |
| D-33 | Desk Push. \$.75 |
| F-33 | Stamped Flush Push. .75 |
| G-33 | " Diamond Push. .75 |
| 605 | Wood Pear Push. .60 |
| 521-524 | Stamped Push. .75 |
| 528 to 534 | " " .95 |
| 536-537 | " " 1.00 |
| 538 | " Oblong Push. 1.25 |
| 541 | " Oblong for Card. 1.75 |
| 543 | " 2 Point. 1.25 |
| 544 | " For Card. 1.20 |
| 545 | 2 Gang Oblong for Cards. 1.85 |
| 545 | 3 " " " 2.55 |
| 545 | 4 " " " 3.75 |
| 546 | Oblong 1 Gang. 1.75 |
| 547 | " 2 " 1.55 |
| 548 | " Sgle. Gang. .75 |
| 549 | " " 1.25 |
| 562 | Desk Push. .60 |
| 577 | Diamond Push. .70 |
| 578 | " " .75 |
| | Wood Push Button. .20 |
| Table Clamp No. 571 without Cord, Floor Push or Plug. .90 | |
| Floor Push No. 560—Nickel. .75 | |
| Under Floor Plate No. 561 Nickel. .90 | |
| Combination Floor Pushes Complete No. 573. 2.60 | |
| " " " " No. 575. 2.75 | |
| Daisy Floor Tread Complete. 1.55 | |

Edwards

| | |
|----------------------------|----------------------------------|
| No. 600 | 2 1/2" Diam. Round. \$.25 |
| No. 601 | 2 1/2" Diam. for Card Round. .40 |
| No. 603 | 1 1/2" Diam. Round. .25 |
| No. 606 | Oval. .30 |
| No. 609 | Oval 2 x 4 1/2. .45 |
| Oblong Push Buttons | |
| No. 602 | 2 Gang for Cards. \$1.05 |
| No. 604 | Oblong. .40 |
| No. 605 | Oblong. .40 |
| No. 607 | Single for Cards. .40 |
| No. 608 | " " .45 |

DESK BUTTONS

Edwards

| | | | |
|---------|-------------------|---------|-------------------|
| No. 59 | 3/4" Hole. \$.80 | No. 621 | 3/4" Hole. \$1.45 |
| No. 63 | 3/4" " .75 | No. 622 | 3/4" " 1.50 |
| No. 620 | 3/4" " .45 | No. 625 | 3/4" " .50 |

OTHER BUTTONS

Edwards

| | |
|---------|---|
| No. 235 | Floor Plug with Remov. Plug & Extension. \$.85 |
| No. 209 | Dixie Floor Tread. 1.60 |
| No. 206 | Table Clamp. 1.10 |
| No. 67 | Pendant Push Oak or Mahogany \$.65—White. .75 |
| No. 68 | Metal Pearl Push. .80 |

DOOR & WINDOW SPRINGS

Edwards

| | | | | | | | | |
|-------------|--------|--------|--------|--------|--------|--------|--------|--------|
| Number..... | 28 | 30 | 30C | 32 | 34 | 38 | 39 | 236 |
| Price..... | \$.60 | \$.90 | \$1.10 | \$1.60 | \$.45 | \$.50 | \$.50 | \$1.10 |

(For Door Openers, See Page PL-20.)

ROUND PUSH BUTTONS

Patrick & Wilkins

| | |
|--|--|
| Stained Wood Push No. 2. \$0.15 | |
| Oak Wood Regular No. 1. .40 | |
| Oak Open, Closed & Double Cont. No. 1. .70 | |
| Oak Triple Contact No. 1. .90 | |
| Cast Brass 1 1/2" Diam. No. 8. .75 | |
| Cast Brass 2 1/2" Diam. No. 9. .80 | |
| Stamped 1 1/2" Diam. No. 20. .25 | |
| Stamped 2 1/2" Diam. No. 27. .25 | |
| Stamped Sgle. Card Holder No. 25. .40 | |

DESK TYPE

Patrick & Wilkins

| | |
|---|--|
| Midget 3/4" Hole. Pearl Center. \$0.85 | |
| Desk 3/4" Hole. " " .40 | |
| Mite 1/2" Hole. " " .70 | |
| Multiple 3/4" Hole. Black Center. 1.35 | |
| Pony Return 3/4" Hole. Black Center. 1.85 | |

OBLONG PUSHES

Patrick & Wilkins

| | |
|---|-------|
| No. | Price |
| 16 Cast Brass 4 1/2 x 1 1/2 Screw Cap. \$1.65 | |
| 31 " " 5 x 2 1/2 " " 2.35 | |
| 44 " " 4 x 2 " " 1.45 | |
| 50 Wrought 4 1/2 x 1 1/2 One Piece. .30 | |
| 55 " " 4 x 2 " " .35 | |
| 708 Wrought Push & Speak One Piece. 1.35 | |
| 907 2 Button & Card Holder. 2.15 | |
| 908 3 " " " 2.95 | |
| 909 4 " " " 4.55 | |

PEAR SHAPED PUSHES

Patrick & Wilkins

| | |
|----------------------------------|--|
| Compound Maple 2 Button. \$2.00 | |
| " 3 " 3.00 | |
| No. 3 Solid Maple One Piece. .55 | |
| No. 4 Fancy Pear, Two " .25 | |
| Wood Rosettes for above. .40 | |

TABLE AND FLOOR PUSHES AND CLAMPS

Patrick & Wilkins

| | |
|---|--|
| Improved Table Clamp N. P. Finish. \$0.90 | |
| Floor Tread Flat Top. 1.10 | |
| Combination Foot Push. .80 | |

DOOR & WINDOW SPRINGS

Patrick & Wilkins

| | |
|---------------------------------|-------------------------------|
| No. 1 Door Spring. \$.35 | Single Window Spring. \$.75 |
| Make & Break Type. .40 | Double " .70 |
| Door Trip. .75 | Transom Spring. 1.50 |
| Closed Circuit Door Spring. .40 | Clad. Circuit Window Spr. .95 |

COMPOUND OR MULTIPLE PUSHES

Patrick & Wilkins

| Style | 1 Butt. | 2 Butt. | 3 Butt. | 4 Butt. |
|--|---------|---------|---------|----------|
| No. 3 Wood For Wall Use. Single Row Without Card Holders. \$1.50 | \$1.80 | \$2.35 | \$3.00 | |
| No. 4 Wood Same As Above But Weighted For Desk Use. 2.60 | 2.95 | 3.50 | 4.25 | |
| No. 5 Wood Angle Type Weighted For Desk Use. .... | ..... | ..... | 12.80 | |
| No. 10 Wood Base For Wall With Card Holders. | 3.35 | 3.75 | 4.00 | |
| No. 12 Wood Base Same As Above But Weighted For Desk Use. | 3.75 | 4.25 | 5.45 | |
| Style | 5 Butt. | 6 Butt. | 8 Butt. | 10 Butt. |
| No. 3 Wood For Wall Use. Single Row Without Card Holders. \$3.50 | \$4.00 | \$4.95 | ..... |  |
| No. 4 Wood Same As Above But Weighted For Desk Use. 4.95 | 5.60 | 6.75 | ..... |  |
| No. 5 Wood Angle Type Weighted For Desk Use. | 13.75 | 16.00 | \$17.50 | |
| No. 10 Wood Base For Wall With Card Holders. | 4.75 | 6.60 | 8.00 | |
| No. 12 Wood Base Same As Above But Weighted For Desk Use. | 6.00 | 7.50 | 8.75 | |

MULTIPLE PUSH BUTTONS

Couch "Pushrites"

With Card Holders

| Number of Buttons | Plain Base Number | Wood Base Type Price | Weighted Base Number | Price | Flush Brass Plate Type Number | Price |
|-------------------|-------------------|----------------------|----------------------|---------|-------------------------------|---------|
| 4 | 7900 | \$ 3.35 | 7980 | \$ 3.75 | 7940 | \$ 5.00 |
| 6 | 7900 | 4.60 | 7980 | 5.20 | | |
| 8 | 7910 | 5.80 | 7990 | 6.65 | 7950 | 9.15 |
| 12 | 7921 | 8.30 | 79010 | 9.60 | 7960 | 13.30 |
| 16 | 7930 | 10.80 | 79020 | 12.45 | 7970 | 17.50 |
| 20 | 793 | 13.30 | 7902 | 15.40 | 797 | 21.60 |

COUCH UNMOUNTED PUSH BUTTONS "WORKRITES"

| | |
|--------------------------------|--|
| No. 97 for 3/4" Hole. \$0.50 | |
| Adaptor No. 0684 for same. .05 | |

BRACKETS FOR INSULATORS

WOOD BRACKETS

| Each | Each |
|---------------------------|--------------------------|
| 1 1/2" x 2" x 10" \$1.10 | 1 1/2" x 2" x 12" \$1.11 |
| 1 1/2" x 2" x 12" .10 | 2" x 2 1/2" x 12" .12 |
| 1 1/2" x 2 1/2" x 12" .10 | 2" x 2 1/2" x 12" .12 |

PINS

| Each | Each |
|---------------------------|---------------------------|
| Locust 1 1/2" x 8" \$1.10 | Locust 1 1/2" x 9" \$1.12 |
| Oak 1 1/2" x 8" .05 | Oak 1 1/2" x 9" .08 |

HOUSE BRACKETS WITHOUT INSULATORS

Peirce

| Light Type | Points | Price | No. | Points | Price | No. | Points | Price |
|------------|--------|--------|-----|--------|--------|-----|--------|--------|
| 153 | One | \$.25 | 154 | One | \$.45 | 150 | One | \$.30 |
| 253 | Two | .60 | 254 | Two | .90 | 242 | Two | .60 |
| 353 | Three | .95 | 354 | Three | 1.15 | 342 | Three | .90 |

WIREHOLDERS WITH INSULATORS

Peirce

| No. | Wires | Spacing | Price |
|------|-------|---------|--------|
| 1607 | One | 0 | \$.25 |
| 190 | " | 0 | .30 |
| 191 | " | 0 | .35 |
| 296 | Two | 6 | .60 |
| 299 | " | 9 | .65 |
| 394 | Three | 4 1/2 | .85 |
| 396 | " | 6 | .95 |

HOUSE RACKS WITH INSULATORS

Peirce

| No. | Wires | Length | Space | Price |
|-----|-------|--------|-------|--------|
| 183 | 1 | 6 1/2 | 0 | \$.45 |
| 286 | 2 | 12 1/2 | 6 | .90 |
| 383 | 3 | 12 1/2 | 3 | .95 |
| 386 | 3 | 18 1/2 | 6 | 1.25 |

SECONDARY RACKS WITH INSULATORS

Peirce

| Light Type | Wires | Space | Price | Heavy Type | Wires | Space | Price |
|------------|-------|-------|--------|------------|-------|-------|--------|
| No. 276 | 2 | 6" | \$.90 | No. 278 | 2 | 8" | \$1.30 |
| 376 | 3 | 6" | 1.30 | 378 | 3 | 8" | 2.05 |
| 1276 | 2 | 8" | .85 | 1278 | 2 | 8" | 1.30 |
| 1376 | 3 | 6" | 1.20 | 1374 | 3 | 4" | 1.40 |
| 2768 | 2 | 8" | .90 | | | | |
| 3768 | 3 | 8" | 1.35 | 1378 | 3 | 8" | 2.05 |

INSULATORS ONLY FOR ABOVE BRACKETS

Peirce

| | |
|-----------------------|------------------------|
| 355 Insulator. \$.20 | 1602 Insulator. \$1.12 |
| 356 " .25 | 1603 " .10 |

PL-8

Brackets

HOUSE BRACKETS WITHOUT INSULATORS National Elec. Products

| Light Type | | | Heavy Type | | | Corner Type | | |
|------------|--------|------------|------------|--------|------------|-------------|--------|------------|
| No. | Points | Price Each | No. | Points | Price Each | No. | Points | Price Each |
| 108-10 | 1 | .25 | 108-10 | 1 | .40 | 111-10 | 1 | .30 |
| 108-26 | 2 | .60 | 108-26 | 2 | .80 | 111-26 | 2 | .60 |
| 108-36 | 3 | .95 | 108-36 | 3 | 1.20 | 111-36 | 3 | .85 |

HOUSE RACKS WITH INSULATORS National Elec. Products

| Light Type | | | Heavy Type | | |
|------------|----------------|---------|------------|----------------|---------|
| No. | Points | Length | No. | Points | Length |
| 104-10 | 1 | 5 1/4" | 101-24 | 2 | 9 1/4" |
| 104-26 | 2 | 11 1/4" | 101-28 | 2 | 13 1/4" |
| 104-36 | 3 | 18" | 101-34 | 3 | 17 1/4" |
| 104-53 | 5 | 18" | 101-44 | 4 | 17 1/4" |
| 104 | Insulator Only | | 101 | Insulator Only | |

WIREHOLDER ACCESSORIES National Elec. Products

| | | | |
|-----------------------------|-----|------------------------------|-----|
| No. 5000 Corner Chair.... | .13 | No. 5040 Break Arm Strap.... | .14 |
| No. 5020 Insulator..... | .18 | No. 5051 " " Bolt.... | .20 |
| No. 5021 U Bolts & Nuts.... | .10 | No. 5052 T Head Screw..... | .03 |

SINGLE POINT WIREHOLDERS National Elec. Products

| No. | Points | Length | No. | Points | Length |
|-----------|--------|---------|-----------|--------|---------|
| 5211..... | 1 | 5 1/4" | 5411..... | 1 | 5 1/4" |
| 5214..... | 2 | 11 1/4" | 5414..... | 2 | 11 1/4" |
| 5215..... | 3 | 18" | 5415..... | 3 | 18" |

WIREHOLDERS WITH INSULATORS National Elec. Products

| For One Wire | | For Two Wires | | For Three Wires | |
|---------------|------|---------------|------|-----------------|------|
| No. | Each | No. | Each | No. | Each |
| No. 5011..... | .30 | No. 5002..... | .60 | No. 5003..... | .90 |
| No. 5001..... | .25 | No. 5012..... | .60 | No. 5023..... | .85 |

WIREHOLDERS WITH INSULATORS National Elec. Products

| Light Type | | | Heavy Type | | |
|------------|----------------|---------|------------|----------------|---------|
| No. | Points | Length | No. | Points | Length |
| 105-1X | 1 | 6" | 106-1 | 1 | 6" |
| 105-10 | 1 | 4 1/4" | 106-10 | 1 | 6" |
| 105-26 | 2 | 10 1/4" | 106-26 | 2 | 11 1/4" |
| 105-36 | 3 | 13 1/4" | 106-36 | 3 | 17 1/4" |
| 105-53 | 5 | 16 1/4" | 106-53X | 5 | 17 1/4" |
| 105 | Insulator Only | | 106 | Insulator Only | |

B-SUNDRIES, BOLTS, ETC.

CARRIAGE BOLTS

Galvanized

| Diam. | 3" | 4" | 5" | 6" | 8" | 10" | 12" | 14" | 16" | 18" |
|-------------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| 1/2" Diam. Each.. | .05 | .05 | .05 | .05 | .07 | .07 | .07 | .07 | .08 | .08 |
| 3/4" " " " " " | .08 | .09 | .09 | .10 | .10 | .11 | .11 | .11 | .12 | .12 |

MACHINE BOLTS WITHOUT WASHERS

Galvanized

| Diam. | 3" | 4" | 5" | 6" | 7" | 8" | 10" | 12" | 14" | 16" | 18" |
|------------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| 1/2" Each..... | .05 | .06 | .07 | .08 | .08 | .09 | .10 | .12 | .12 | .14 | .15 |
| 3/4" " " " " " | .08 | .09 | .10 | .11 | .12 | .13 | .15 | .18 | .18 | .20 | .21 |
| 1" " " " " " | .12 | .13 | .14 | .15 | .16 | .17 | .19 | .22 | .24 | .26 | .28 |
| 1 1/4" " " " " " | .15 | .16 | .17 | .19 | .20 | .22 | .25 | .28 | .30 | .33 | .36 |

STOVE BOLTS

Round or Flat Head

| Length | | Diameter | |
|------------------|---------------------|----------|------|
| Up to 1" | Long Per Dozen..... | 1/2" | 3/4" |
| 1 1/4" to 1 1/2" | .10 | .10 | .12 |
| 1 1/2" to 2 1/4" | .10 | .10 | .12 |
| 2 1/4" to 3 1/4" | .11 | .11 | .13 |
| 3 1/4" to 4" | .13 | .13 | .15 |

TOGGLE BOLTS, STEEL

"Paine"

| Size—Diameter | 2" | 3" | 3 1/2" | 4" | 5" | 6" |
|---------------------------|-----|-----|--------|-----|-----|-----|
| 1/2" Long Price Each..... | .10 | .10 | .10 | .10 | .11 | .12 |
| 3/4" " " " " " | .10 | .10 | .10 | .10 | .11 | .12 |
| 1" " " " " " | .11 | .11 | .11 | .11 | .12 | .13 |
| 1 1/4" " " " " " | .13 | .13 | .13 | .13 | .14 | .15 |

NOTE: For Brass Toggle Bolts—2 1/2 times above prices.

ROUND FIXTURE BLOCKS Solid Half or Full Plowed

| | 4 & 5" Round | 6 & 7" Round |
|---|--------------|--------------|
| 3" x 4" Round.... | \$.15 | \$.18 |
| 12" " " " " " | ... | ... |
| Ceiling Button—P & S Porcelain No. 170—Each | ... | \$.12 |
| Switch Bases—See Snap Switches Page PL-19. | ... | ... |

CORDS, FIXTURE, LAMP AND HEATER

SINGLE FIXTURE CORD

| Single Lamp Cord | Type | Price Per Foot | No. 18 | No. 16 | No. 14 | No. 12 |
|-------------------------------------|------|----------------|--------|-----------|--------|--------|
| Single Cotton Covered Cord—Light | F-64 | \$.01 | \$.02 | \$.02 1/2 | \$.03 | \$.04 |
| Single Cotton Covered Cord—Heavy | F-32 | .01 1/2 | .02 | .03 | .04 | ... |
| Single Artificial Silk Cord—Heavy.. | F-32 | .02 | .03 | .04 | ... | ... |

DOUBLE LAMP CORD

| Regular Lamp Cord | Type | Price Per Foot | No. 18 | No. 16 | No. 14 | No. 12 |
|-----------------------------------|------|----------------|--------|--------|--------|--------|
| Cotton Covered Twisted Pair..... | C | \$.02 1/2 | \$.04 | \$.06 | \$.10 | ... |
| " " Parallel Pair..... | PO | .03 1/2 | .05 | .08 | ... | ... |
| " " Twisted Parallel Pair..... | PD | .04 | .05 | ... | ... | ... |
| Artificial Silk Twisted Pair..... | C | .03 1/2 | .05 | .08 | ... | ... |
| " " Parallel Pair..... | PO | .04 | .06 | .08 | ... | ... |

REINFORCED CORD

| | Type | Price Per Foot | No. 18 | No. 16 | No. 14 | No. 12 |
|--------------------------------|------|----------------|--------|--------|--------|--------|
| Not Asbestos | | | | | | |
| Cotton Covered Light Type 1/4" | PS | \$.04 | \$.05 | \$.08 | ... | ... |
| " " Heavy " 1/4" | P | .05 | .07 | .09 | \$.13 | ... |
| Weatherproof Light Type 1/4" | PSWP | .04 | .06 | ... | ... | ... |
| " " Heavy Type 1/4" | PWP | .05 | .06 | .09 | ... | ... |

HEAVY DUTY PORTABLE CORD "Duracord" or Similar. Extra Reinforced

| Type | PS Light 2 Cond. Port. Cord.. | Price Per Foot | No. 18 | No. 16 | No. 14 | No. 12 | No. 10 |
|-----------------------|-------------------------------|----------------|--------|--------|--------|--------|--------|
| " P Heavy 2 " " " " " | .14 | \$.17 | \$.21 | \$.25 | \$.31 | ... | ... |
| " P " 3 " " " " " | ... | .18 | .26 | .33 | .41 | ... | ... |

ALL RUBBER CORD

"Tirax" "Royal" "Super" "Indestructo" or Similar

| | Price Per Foot | No. 18 | No. 16 | No. 14 | No. 12 | No. 10 |
|----------------------------------|----------------|--------|--------|--------|--------|--------|
| SJ Junior 2 Conductor Black..... | \$.09 | \$.11 | ... | ... | ... | ... |
| " " 2 " Green..... | .10 | .13 | ... | ... | ... | ... |
| " " 3 " Black..... | .13 | .16 | ... | ... | ... | ... |
| S Type Heavy 2 Conductor Black.. | .13 | .16 | \$.23 | \$.29 | \$.37 | ... |
| " " 3 " " " " " | .19 | .22 | .29 | .34 | .46 | ... |
| " " 4 " " " " " | .20 | .25 | .35 | .45 | .59 | ... |
| " " Sgle. Cond. Black... | .08 | .09 | .10 | .11 | .13 | ... |

HEATER CORD

| | Price Per Foot | No. 18 | No. 17 | No. 16 | No. 14 | No. 12 |
|--------------------------------------|----------------|---------|--------|--------|--------|--------|
| Asbestos Covered | | | | | | |
| Stand. Twisted or Wound Asbest. 1/4" | \$.05 | \$.06 | \$.06 | \$.10 | \$.12 | ... |
| American Beauty Heater Cord..... | ... | .09 | ... | .12 | .21 | ... |
| Rockbestos Heater Cord..... | .07 | .07 1/2 | .08 | .10 | .20 | ... |

| | Price Per Foot | No. 18 | No. 17 | No. 16 | No. 14 | No. 12 |
|---|----------------|--------|--------|--------|--------|--------|
| "Deltabeston" Heater Cord | | | | | | |
| Type A Asbestos Braid overall..... | \$.10 | ... | \$.11 | \$.12 | \$.18 | ... |
| " C Cotton Braid overall..... | .08 | .09 | .10 | .11 | .15 | ... |
| " D " on ea. cond... .. | .08 | .09 | .10 | .11 | .16 | ... |
| " E Cotton on ea Cond. & over both..... | .09 | .10 | .11 | .12 | .17 | ... |

NOTE—For Armored Cords See Page PL-9.
" Extension Cords See Page PL-10.
" Fixture Wire See Pages PL-26 & 27.
" Bell Wire See Page PL-27.

MISCELLANEOUS CORD

| Description | Type | Price Per Foot | No. 18 | No. 16 | No. 14 | No. 12 | No. 10 |
|---------------------------|------|----------------|--------|--------|--------|--------|--------|
| x Brewery Cord..... | CB | \$.04 | \$.05 | \$.07 | ... | ... | ... |
| x Canvasite Cord..... | CC | .06 | .07 | .09 | ... | ... | ... |
| x Deck Cable..... | PWP | .07 | .08 | .11 | ... | ... | ... |
| x Packinghouse Cable..... | PKWP | .07 | .08 | .10 | ... | ... | ... |
| x Stage & Theatre Cable.. | T | .07 | .08 | .10 | \$.13 | \$.16 | ... |

x Note—These prices are based on less than coil lot trade prices.

CONDUCTING BELL CORD

Spun Silk

| Number of Conductors | 2 | 3 | 4 | 5 | 8 | 10 | 14 | 18 |
|----------------------|-------|-------|-------|-------|-------|-------|-------|-------|
| Price Per Foot..... | \$.08 | \$.18 | \$.20 | \$.21 | \$.28 | \$.35 | \$.68 | \$.88 |

Note—For Armored Lamp Cord See Page PL-9.

ELECTRICAL CONTRACTING

CONDUIT, ELBOWS, COUPLINGS, BUSHINGS, ETC.

RIGID CONDUIT

| | Black Per Foot | Galvd. Per Foot | Cutting & Threading Per Thread | Cutting Only Per Cut |
|--------|-------------------|--------------------|--------------------------------------|----------------------------|
| 1/2" | .10 | .11 | .20 | .10 |
| 3/4" | .13 | .14 | .20 | .10 |
| 1" | .18 | .20 | .25 | .10 |
| 1 1/4" | .24 | .27 | .30 | .15 |
| 1 1/2" | .29 | .32 | .35 | .15 |
| 2" | .39 | .43 | .40 | .20 |
| 2 1/2" | .61 | .67 | .60 | .25 |
| 3" | .79 | .88 | .60 | .30 |
| 3 1/2" | 1.00 | 1.10 | .70 | .30 |
| 4" | 1.22 | 1.34 | .80 | .30 |

ELBOWS, COUPLINGS, GRUNIONS, BUSHINGS, LOCKNUTS

Price Each

| PL-10 END | | | | | | | Erickson |
|---------------------|-----------------|-------|-----------|-------|----------|---------|------------------------|
| Size Each | Bends or Elbows | | Couplings | | Bushings | Locknut | Coupl. or Unions |
| | Black | Galv. | Black | Galv. | Galv. | Galv. | Galv. |
| 1/2"..... | \$.15 | .17 | \$.10 | .11 | .02 | .01 | .40 |
| 3/4"..... | .19 | .23 | .14 | .15 | .03 | .01 1/2 | .55 |
| 1"..... | .29 | .33 | .18 | .20 | .08 | .03 | .75 |
| 1 1/4"..... | .40 | .43 | .23 | .24 | .10 | .06 | 1.20 |
| 1 1/2"..... | .53 | .58 | .29 | .32 | .13 | .10 | 1.66 |
| 2"..... | .84 | .97 | .38 | .42 | .23 | .13 | 3.05 |
| 2 1/2"..... | 1.36 | 1.56 | .55 | .60 | .34 | .22 | 5.90 |
| 3"..... | 3.65 | 4.15 | .73 | .80 | .50 | .38 | 9.40 |
| 3 1/2"..... | 8.00 | 9.15 | .97 | 1.05 | 1.00 | .50 | 14.10 |
| 4"..... | 9.25 | 10.55 | 1.21 | 1.31 | 1.60 | .65 | 18.85 |
| Also on Page PL-10. | | | | | | | Also on Page PL-5. |
| | | | | | | | Also on Page PL-15. |

Also on Page PL-10.

Also on
Page PL-5.Also on
Page PL-15.

FLEXIBLE METALLIC CONDUIT

"Greenfield", "Flexsteel", or Equivalent

| | | | | | | | | |
|---------------------------|-------|-------|-------|-------|-------|--------|--------|-------|
| | 3/8" | 1/2" | 5/8" | 3/4" | 1" | 1 1/4" | 1 1/2" | 2" |
| Single Strip Per Foot.... | \$.08 | \$.10 | \$.12 | \$.20 | \$.36 | \$.40 | \$.57 | \$.70 |
| Double Strip Per Foot.... | .10 | .12 | .14 | .23 | .40 | .45 | .64 | .80 |

For Fittings for Metallic Conduit See Page PL-14.
For Non-Metallic Conduit or Loom See Page PL-15.
For Steel Armored Cable & Lead Covered See Next Item.

For Fittings for Metallic Conduit See Page PL-14.
For Non-Metallic Conduit or Loom See Page PL-15.
For Steel Armored Cable & Lead Covered See Next Item.

CABLE, ARMORED & NON-METALLIC SHEATHED

ARMORED CABLE, "BX", "ABC", "FLEXSTEEL", OR SIMILAR

| | | | Price Per Foot | No. 14 | No. 12 | No. 10 |
|-----------------|-------------|--------------|----------------|--------|--------|--------|
| TWO CONDUCTOR | Solid | Single Strip | | \$.06 | \$.09 | \$.13 |
| THREE CONDUCTOR | Stranded | " | | .09 | .12 | .16 |
| FOUR CONDUCTOR | Solid | " | | .17 | .19 | .25 |
| ONE CONDUCTOR | Solid | " | | .08 | .09 | .10 |
| CONDUCTOR | Stranded | " | | .07 | .11 | .14 |
| OVALFLEX | 2 Conductor | " | | .10 | .14 | .18 |
| | 3 Conductor | " | | | | |

| | | | Price Per Foot | No. 8 | No. 6 | No. 4 |
|-----------------|-------------|--------------|----------------|-------|-------|-------|
| TWO CONDUCTOR | Solid | Single Strip | | \$.21 | \$.30 | \$.47 |
| THREE CONDUCTOR | Stranded | " | | .26 | .36 | .61 |
| FOUR CONDUCTOR | Solid | " | | .09 | .14 | .25 |
| ONE CONDUCTOR | Solid | " | | .12 | .15 | .25 |
| CONDUCTOR | Stranded | " | | .09 | .14 | .25 |
| OVALFLEX | 2 Conductor | " | | .07 | .11 | .14 |
| | 3 Conductor | " | | .10 | .14 | .18 |

Double Strip Armored Cable add 30% to above prices.

Anti-Short Fibre Bushings for ABC Cable, Each..... \$.01
Clips or Staples 1/2" for Armored or Non-Metallic Cable, Each..... .14

"B X L" LEAD COVERED ARMORED CABLE

| | | | Price Per Foot | No. 14 | No. 12 | No. 10 |
|-------------------------------------|--|--|----------------|--------|--------|--------|
| Single Conductor Solid Lead Covered | | | | \$.11 | \$.13 | \$.15 |
| " " Stranded " " " | | | | .22 | .28 | .34 |
| Two Conductor Solid " " " | | | | .27 | .34 | .40 |
| Three " " Stranded " " " | | | | | | |

| | | | Price Per Foot | No. 18 | No. 16 | No. 14 |
|-------------------------------------|--|--|----------------|--------|--------|--------|
| Single Conductor Solid Lead Covered | | | | \$.18 | \$.25 | \$.31 |
| " " Stranded " " " | | | | .52 | .76 | .95 |
| Two " " Solid " " " | | | | .62 | 1.00 | 1.24 |
| Three " " Stranded " " " | | | | | | |

ARMORED LAMP CORD

| | | | Per Foot | No. 18 | No. 16 | No. 14 |
|-------------------------|--------------|--|----------|--------|--------|--------|
| Plain Armored Lamp Cord | Single Strip | | | \$.10 | \$.12 | \$.15 |
| Reinforced Lamp Cord | " | | | .18 | .20 | .28 |

Add 30% for Double Strip

August, 1929

NON-METALLIC SHEATHED CABLE "Romex", "Loomwire", "Wireflex", or similar

| | Size | No. 14 | No. 12 | No. 10 |
|---------------------------------|------|---------|-----------|---------|
| 2 Conductor Without Ground Wire | | \$.05 | \$.06 1/2 | \$.09 |
| " " With " " " | | .05 1/2 | .07 | .10 |
| 3 " Without " " " | | .08 | .11 | .14 |
| 3 " With " " " | | .08 1/2 | .11 1/2 | .14 1/2 |

| | Size | No. 8 | No. 6 | No. 4 |
|---------------------------------|------|---------|---------|-------|
| 2 Conductor Without Ground Wire | | \$.14 | \$.20 | \$.27 |
| " " With " " " | | .15 | .21 1/2 | .29 |
| 3 " Without " " " | | .22 | .29 | .39 |
| 3 " With " " " | | .22 1/2 | .30 1/2 | .42 |

| | No. 14 | No. 12 | No. 10 | No. 8 | No. 6 | No. 4 |
|--------------------|--------|--------|--------|-------|-------|-------|
| Straps "Buck" Each | \$.01 | \$.01 | \$.01 | \$.01 | \$.01 | \$.01 |

| | No. 14 | No. 12 | No. 10 | No. 8 | No. 6 | No. 4 |
|-----------------------------------|--------|--------|--------|-------|-------|-------|
| Grounding Clip (Open Wiring) Each | .03 | .03 | .03 | .... | .... | .... |

| | No. 14 | No. 12 | No. 10 | No. 8 | No. 6 | No. 4 |
|---------------------------|--------|--------|--------|-------|-------|-------|
| Connectors Threadless Ea. | .07 | .07 | .07 | .... | .... | .... |

| | No. 14 | No. 12 | No. 10 | No. 8 | No. 6 | No. 4 |
|--------------|--------|--------|--------|-------|-------|-------|
| Threaded Ea. | .10 | .10 | .20 | .30 | .50 | .50 |

CUTOUPS OR FUSE BLOCKS

PLUG CUTOUPS

125 Volts, 30 Amp. Porcelain

| Description | Universal No. | Price Standard Open Type | Covered Type |
|-------------------------------|------------------|--------------------------------|-----------------|
| Single Pole—Main Line | 62569 | \$.25 | .... |
| Double " " " | 62565 | .35 | \$.50 |
| Triple " " " | 62165 | .50 | .65 |
| Double Pole Single Branch | 61935 | .85 | .85 |
| " " Double " " | 62587 | .65 | 1.00 |
| " " Cross " " | 8020 | .40 | .... |
| Triple to D. P. Double Branch | 62199 | .65 | 1.10 |
| Triple Pole Single Branch | 8042 | .65 | 1.10 |
| " " Double " " | 62135 | .85 | 1.75 |

DEAD FRONT PLUG CUTOUPS

With Covers

| | 4 Circ. | 8 Circ. | 12 Circ. | 16 Circ. |
|--------------------------------------|---------|---------|----------|----------|
| Benjamin 30 Amps. | | | | |
| With Flush Cover 59904-8-12-16 | \$1.80 | \$3.60 | \$5.40 | \$7.20 |
| With Overhanging Cover 59804-8-12-16 | 2.00 | 4.10 | 6.00 | 8.10 |

BRYANT

| | Short Cover | Long Cover |
|--|----------------|---------------|
| Double Pole Single Branch No. 71935 | \$.95 | 1.45 |
| " " Double Branch No. 72587 & 82587 | 1.45 | \$1.55 |
| Triple to Dble. Pole Dbl. Branch No. 72199 & 82199 | 1.55 | 1.65 |

GENERAL ELECTRIC

| | Without Cover | With Cover |
|--|------------------|---------------|
| 2 Circuit No. 2436 & 2435 30 Amp. 250 Volt | \$.70 | \$1.20 |
| 4 " No. 2441 & 2440 " " " | .90 | 1.75 |

CARTRIDGE CUTOUPS

| Porcelain Base, 250-600 Volts | 0-30 Amp. | 31-60 Amp. | 61-100 Amp. |
|--|--------------|---------------|----------------|
| Single Pole Main Line Enclosed Porcelain | \$.35 | \$.60 | \$1.20 |
| Double " " " " | .50 | 1.25 | 2.40 |
| Triple " " " " | .70 | 1.80 | 3.30 |
| Double Pole Two Wire Single Branch Porcelain | .60 | 1.60 | .... |
| " " Double " " | 1.15 | 3.00 | .... |
| Double Pole Three Wire Double Branch Porcelain | 1.30 | 3.55 | .... |
| Triple Pole Three Wire Single Branch Porcelain | 1.25 | 2.80 | .... |
| Triple Pole Three Wire Double Branch Porcelain | 2.00 | 5.05 | .... |
| Single Pole Main Line | .55 | .80 | 1.75 |

SLATE BASE

| | 30 A. | 60A. | 100A. | 200A. | 400A. | 600A. |
|------------------------------|-------|-------|--------|--------|--------|---------|
| 250 Volt 600 Volt | | | | | | |
| Single Pole-Slate Base-250 V | \$.45 | \$.70 | \$1.50 | \$2.90 | \$7.15 | \$10.00 |
| 600 V | .65 | 1.00 | 1.90 | 3.15 | 8.15 | 10.60 |

NOTE—Cartridge Cutouts are sometimes called Enclosed Cutouts.

C-SUNDRIES

GROUND CLAMPS

| Standard Adjustable Ground Clamps, any make..... | | 1/2 to 1 1/4" | 1 1/4 to 2" | 2 to 3" |
|--|--|---------------|-------------|----------|
| | | No. 3 | No. 4 | No. 5 |
| | | \$.12 | \$.15 | \$.20 |
| Blackburn..... | | No. 3 | No. 4 | No. 5 |
| | | \$.24 | \$.28 | \$.37 |
| | | \$.45 | | |
| Other Types | | s 1 3/4" | s 2" | s 2 1/2" |
| | | No. 3 | No. 4 | No. 5 |
| Chase Shawmut 3661-68 | | \$.25 | \$.30 | \$.35 |
| G. V. A Series 5000 | | \$.26 | \$.32 | \$.37 |
| G. V. S Series 8000 | | \$.11 | \$.13 | \$.14 |
| | | \$.15 | \$.20 | \$.25 |
| | | \$.32 | \$.45 | \$.58 |
| | | \$.65 | \$.78 | \$.90 |
| | | \$.32 | \$.40 | \$.48 |

Other Types 8 x 1/2" 1" 1 1/4" 1 1/2" 2" 2 1/4" 3"

Chase Shawmut 3661-68 \$.20 \$.25 \$.30 \$.35 \$.40 \$.45 \$.50 \$.55

G. V. A Series 5000... .26 .32 .37 .45 .52 .58 .65 .70

G. V. S Series 8000... .11 .13 .14 .15 .20 .25 .32 .40

STRAPS, CLIPS OR CLAMPS

For Pipe, Without Screws

| | 1/2" | 3/4" | 1" | 1 1/4" | 1 1/2" | 2" | 2 1/4" | 3" |
|----------------------------|-------|-------|-------|--------|-----------|-------|--------|-------|
| Galvznd. Straps, 2 Hole | \$.01 | \$.01 | \$.01 | \$.01 | \$.01 1/2 | \$.02 | \$.03 | \$.04 |
| Light Steel Straps, 1 Hole | .03 | .04 | .05 | .07 | .10 | .15 | .25 | .45 |
| Mall. Iron Straps, 1 Hole | .06 | .07 | .08 | .10 | .17 | .25 | .45 | .70 |
| P & S Conduit Clamps | .10 | .14 | .18 | .22 | .26 | | | |

(See Also Page PL-25)

COLORING & FROSTING LIQUID

| | 7 ounce Cans | 15 ounce Cans | 30 ounce Cans | 1/4 Pint Bottle | 1 Pint Bottle | Quart Bottle |
|-------------------|-----------------|------------------|------------------|--------------------|---------------------|-----------------|
| Crescent (McGill) | | | | \$1.20 | \$2.30 | \$4.00 |
| Cefco | \$2.60 | \$4.20 | \$7.25 | .... | .... | .... |
| Franco | .... | .... | .... | .... | 2.30 | 4.60 |
| Clips for Loom | .... | .... | .... | .... | 2c Each or 3 for 5c | .... |
| Crowfeet | .... | .... | .... | .... | 1/2" \$.10 Each | .... |

CORD & WIRE CONNECTORS

SMALL FIXTURE & WIRE CONNECTORS

Solderless

| Insulated Solderless Wire or Fixture Connectors Similar to "Simplex" | |
|--|-------|
| "Wirenuts" "Marr" "No Torch" "Wirelets" "Ideal" Etc.—each | \$.10 |
| Non-Insulated Solderless Wire Connectors—2 Screw—All Metal | .10 |

PL-10

Cord & Wire Connectors

| SET SCREW CONNECTORS | | | | | |
|----------------------------|-----------|---------|---------|---------|---------|
| Round Brass | | | | | |
| Wire Size | No. 12-14 | No. 10 | No. 8 | No. 6 | No. 4 |
| Divided Wall—2 Screws..... | \$.10 | \$.12 | \$.13 | \$.14 | \$.19 |
| Hole Thru 4 "..... | .14 | .15 | .16 | .17 | .24 |
| " " 2 "..... | .14 | .16 | .18 | .20 | .25 |
| Wire Size | No. 2 | No. 1/0 | No. 2/0 | No. 3/0 | No. 4/0 |
| Divided Wall—2 Screws..... | \$.20 | ..... | ..... | ..... | ..... |
| Hole Thru 2 "..... | .28 | \$.35 | \$.42 | \$.70 | \$.95 |
| " " 4 "..... | .34 | .38 | .55 | .70 | .95 |

| DOSSERT SOLDERLESS CONNECTORS | | | | | | |
|-------------------------------|-------------|------------|--------|---------|---------|---------|
| Size of Conductor | Up to No. 4 | 3 to No. 1 | No. 0 | No. 2/0 | No. 3/0 | No. 4/0 |
| 2 Way S & Elbows.. | \$.65 | \$.75 | \$.80 | \$ 1.00 | \$ 1.20 | \$ 1.40 |
| Cable Taps..... | 1.00 | 1.10 | 1.20 | 1.40 | 1.75 | 2.10 |
| 3 Way S & Y's..... | 1.00 | 1.10 | 1.20 | 1.40 | 1.75 | 2.10 |
| Lugs—All Types.... | .50 | .60 | .60 | .70 | .90 | 1.10 |

| CORD & MOTOR CONNECTORS | | | | | | |
|-------------------------|------------|--------------|-----------|----------|--------|-----|
| | | Complete | Body Only | Cap Only | | |
| | | No. | No. | No. | | |
| Arrow | | | | | | |
| Midget Comp. | 8238 | Price \$.50 | Price | Price | | |
| " " Arrolite | 8239 | .65 | ..... | ..... |  |  |
| Motor Conn. | RP-8221 | .55 | 8221 | RP | \$.10 | |
| " " " | RL-8221 | .65 | 8221 | RL | .20 | |
| " " " | RA-8222 | .55 | 8222 | RA | .15 | |
| " " " | RM-8222 | .70 | 8222 | RM | .25 | |
| " " " | TM-8222 | .70 | 8222 | TM | .25 | |
| " " " | RH-8224 | .90 | 8224 | RH | .30 | |
| " " " | RG-8281 | .90 | 8281 | RG | .30 | |
| " " " | 8330 to 33 | .80 | ..... | ..... | ..... |  |
| " " " | 8334 to 37 | .90 | ..... | ..... | ..... |  |
| Bryant | | | | | | |
| Motor Conn. | KR-130 | .60 | 130 | KR | .20 | |
| " " " | KG-103 | .60 | 103 | KG | .20 | |
| " " " | KT-130 | .55 | 130 | KT | .10 | |
| Hubbell | | | | | | |
| Cord Connector | 5894 | .60 | 5574 | .45 | 5896 | .20 |
| " " " | 6116 | .65 | 6118 | .45 | 5964 | .15 |
| " " " | 6179 | .60 | 6630 | .45 | 6631 | .20 |
| " " " | 6180 | .65 | 6630 | .45 | 6181 | .15 |
| " " " | 5518 | .60 | 5574 | .45 | 5420 | .20 |
| " " " | 7083 | 1.30 | 7084 | .85 | 7056 | .50 |
| " " " | 7090 | 1.80 | 7091 | 1.10 | 7092 | .80 |
| " " " | 6408 | 1.25 | 6409 | .90 | 6149 | .45 |
| Weber | | | | | | |
| Cord Connector | 2274 | .60 | .74 | .45 | 2200 | .20 |
| Wirt | | | | | | |
| Cord Connector | .56 | .55 | | | | |

NOTE: For Attachment Plugs and other caps—See Pages PL-16 & PL-17.

E-SUNDRIES

| EXTENSION CORDS—MADE UP | | | | | |
|---|--|--|---|---|---------|
| With Attachment Plug & Socket, but Guards-Lamps & Handles Extra | | | | | |
| Length in Feet | With Lamp Cord and Key Socket No. 18 Twisted | With Reinforced Cord and Key Socket No. 18 | With Artificial Silk Cord and Key Socket No. 18 | With Artificial Silk Cord and Key Socket No. 16 | |
| 4 Foot..... | \$.95 | \$ 1.05 | \$ 1.10 | \$ 1.00 | \$ 1.10 |
| 6 "..... | 1.00 | 1.15 | 1.20 | 1.10 | 1.20 |
| 8 "..... | 1.05 | 1.25 | 1.30 | 1.20 | 1.30 |
| 10 "..... | 1.10 | 1.35 | 1.40 | 1.30 | 1.40 |
| 12 "..... | 1.15 | 1.45 | 1.50 | 1.40 | 1.50 |
| 14 "..... | 1.20 | 1.55 | 1.60 | 1.50 | 1.60 |
| 16 "..... | 1.25 | 1.65 | 1.70 | 1.60 | 1.70 |
| 18 "..... | 1.30 | 1.75 | 1.80 | 1.70 | 1.80 |
| 20 "..... | 1.35 | 1.85 | 1.90 | 1.80 | 1.90 |
| 22 "..... | 1.40 | 1.95 | 2.00 | 1.90 | 2.00 |
| 24 "..... | 1.45 | 2.05 | 2.10 | 2.00 | 2.10 |
| Length in Feet | With All Rubber Cord and Weatherproof Socket | | | | |
| | No. 18 Light | No. 16 | No. 18 Heavy | No. 16 | |
| 4 Foot..... | \$ 1.25 | \$ 1.40 | \$ 1.45 | \$ 1.55 | |
| 6 "..... | 1.45 | 1.65 | 1.75 | 1.85 | |
| 8 "..... | 1.65 | 1.90 | 2.05 | 2.15 | |
| 10 "..... | 1.85 | 2.15 | 2.35 | 2.45 | |
| 12 "..... | 2.05 | 2.40 | 2.65 | 2.75 | |
| 14 "..... | 2.25 | 2.65 | 2.95 | 3.05 | |
| 16 "..... | 2.45 | 2.90 | 3.25 | 3.35 | |
| 18 "..... | 2.65 | 3.15 | 3.55 | 3.65 | |
| 20 "..... | 2.85 | 3.40 | 3.85 | 3.95 | |
| 22 "..... | 3.05 | 3.65 | 4.15 | 4.25 | |
| 24 "..... | 3.25 | 3.90 | 4.45 | 4.55 | |

| ELBOWS & BENDS For Rigid Conduit | | | | | |
|----------------------------------|--------|---------|---------|---------|---------|
| Size | 1/2" | 3/4" | 1" | 1 1/4" | 1 1/2" |
| Black..... | \$.15 | \$.19 | \$.29 | \$.40 | \$.53 |
| Galv..... | .17 | .23 | .33 | .43 | .58 |
| Size | 2" | 2 1/2" | 3" | 3 1/2" | 4" |
| Black..... | \$.84 | \$ 1.36 | \$ 3.65 | \$ 8.00 | \$ 9.25 |
| Galv..... | .97 | 1.56 | 4.15 | 9.15 | 10.55 |

EXPANSION SHIELDS & ANCHORS

| These Prices Do Not Include Screws. | | | | |
|-------------------------------------|------------------|-----------------|-----------------|------------|
| Size of Hole | Length In Inches | Inside Diameter | Takes Screw No. | Price Each |
| 1/8" | 1/4 to 1 1/4" | 1/8" | 5-6-7 | \$.05 |
| 1/4" | 1/4 to 1 1/4" | 1/4" | 5-6-7 | .06 |
| 3/8" | 1/4 & 1 1/4" | 3/8" | 5-6-7 | .08 |
| 1/2" | 1/2"-1 1/4" | 1/2" | 8-9-10-11 | .06 |
| 5/8" | 1 1/4"-1 1/2" | 5/8" | 8-9-10-11 | .06 |
| 3/4" | 1 1/2"-1 3/4" | 3/4" | 8-9-10-11 | .08 |
| 7/8" | 1 3/4"-2" | 7/8" | 8-9-10-11 | .09 |
| 1" | 2"-2 1/4" | 1" | 8-9-10-11 | .11 |
| 1 1/8" | 2 1/4"-2 1/2" | 1 1/8" | 12-13-14 | .06 |
| 1 1/4" | 2 1/2"-2 3/4" | 1 1/4" | 12-13-14 | .09 |
| 1 1/2" | 2 3/4"-3" | 1 1/2" | 12-13-14 | .11 |
| 1 3/4" | 3"-3 1/4" | 1 3/4" | 12-13-14 | .13 |
| 2" | Up to 1" | 2" | 15 to 18 | .08 |
| 2 1/8" | 1 1/4" | 2 1/8" | 15 to 18 | .11 |
| 2 1/4" | 1 1/2" | 2 1/4" | 15 to 18 | .14 |
| 2 1/2" | 2" | 2 1/2" | 15 to 18 | .11 |
| 2 3/4" | 2 1/4" | 2 3/4" | 15 to 18 | .20 |

FITTINGS, CONDUIT, THREADED

STANDARD TYPES, COVERS EXTRA
"Condulets" "Taplets" "Unilets" "V. V." "Electrolets"
"Powerlets" "Adaptilets" Etc.

| Type | 1/2" | 3/4" | 1" | 1 1/4" | 1 1/2" |
|------------|--------|--------|--------|--------|---------|
| A 1-Piece | \$.33 | \$.44 | \$.60 | \$.87 | \$ 1.12 |
| B 2-Piece | .40 | .50 | .70 | 1.12 | 1.47 |
| BE 2-Piece | .55 | 1.05 | 1.55 | 2.38 | 3.15 |
| C 1-Piece | .50 | .57 | .85 | 1.32 | 1.71 |
| CO 2-Piece | .70 | .81 | 1.05 | 1.75 | 2.25 |
| D 2-Piece | .48 | .58 | .80 | 1.32 | 1.71 |
| E 2-Piece | .40 | .50 | .70 | 1.12 | 1.46 |

(See Page PL-13)

| Type | 2" | 2 1/2" | 3" | 3 1/2" | 4" |
|-----------------|---|--------|------|--------|------|
| LB-LF-LR | For Special Form 6 Fittings See Page PL-13. | | | | |
| LBB-LFB-LRB | .56 | .63 | .81 | 1.47 | 1.96 |
| LBL-LBR-LUA | .81 | 1.12 | 1.33 | 1.75 | 2.80 |
| T All One Size | .67 | .80 | 1.12 | 1.71 | 2.37 |
| TA All One Size | .98 | 1.05 | 1.40 | 2.18 | 3.22 |
| TB-TL-TR | .68 | .81 | 1.12 | 1.71 | 2.38 |
| U-UB-UF | .68 | .75 | 1.10 | 1.76 | 2.35 |
| X All One Size | .84 | 1.09 | 1.47 | 1.98 | 2.50 |
| Gaskets | .14 | .14 | .21 | .28 | .28 |
| Reducers | .21 | .21 | .25 | .42 | .56 |
| Unions | .63 | .70 | 1.05 | 1.48 | 2.52 |

NOTE: For Special Prices on Types F&L Entrance Fittings See Page PL-13.

COVERS
For Above

| | 1/2" | 3/4" | 1" | 1 1/4" | 1 1/2" |
|--------------------------------|--------|--------|--------|--------|--------|
| Sheet Steel Blank Met. Cover | \$.11 | \$.15 | \$.33 | \$.45 | |
| Cast-Iron | .21 | .31 | .59 | .70 | |
| Porcelain with Holes | .14 | .22 | .35 | .51 | |
| Metal with 1/4 Nipple | .28 | .35 | .59 | .65 | |
| " " " " | .33 | .40 | .64 | .70 | |
| Porcelain with 1/4 Nipple | .35 | .42 | .66 | .73 | |
| " " " " | .42 | .49 | .67 | .88 | |
| " " " " | .49 | .57 | .70 | .95 | |
| Porcelain for Drop Cord | .49 | .56 | .70 | | |
| Porcelain Weatherproof Sockets | .22 | .35 | .56 | | |
| Composition with Holes | .28 | .42 | .70 | 1.40 | |
| Composition Split with Holes | .56 | .84 | 1.40 | 2.80 | |

| | 1 1/2" | 2" | 2 1/2" | 3 1/2" | 4" |
|--------------------------------|--------|--------|---------|---------|----|
| Sheet Steel Blank Met. Cover | \$.63 | \$.79 | \$ 1.05 | \$ 1.12 | |
| Cast Iron | .98 | 1.26 | 1.61 | 1.75 | |
| Porcelain with Holes | .67 | .84 | 1.12 | 1.26 | |
| Metal with 1/4 Nipple | .82 | | | | |
| " " " " | .88 | | | | |
| Porcelain with 1/4 Nipple | 1.01 | | | | |
| " " " " | 1.08 | | | | |
| " " " " | 1.16 | | | | |
| Porcelain for Drop Cord | | | | | |
| Porcelain Weatherproof Sockets | | | | | |
| Composition with Holes | 1.55 | 1.68 | | | |
| Composition Split with Holes | 3.10 | 3.36 | | | |

RECEPTACLES & ROSETTES

For Above

| (For Description See Crouse Hinds' Catalog) | 1/2" | 3/4" | 1" |
|---|--------|--------|--------|
| Lamp Receptacle without Shade Holder Groove | \$.35 | \$.42 | \$.50 |
| " " " " with Shade Holder Groove | .42 | .50 | .56 |
| Fixture Rosette with 1/4 or 3/4 Nipple—Male or Female | .56 | .63 | .70 |
| Cord Rosette with One Outlet | .42 | .50 | .56 |
| " " " " Two Outlets | .50 | .56 | .63 |
| Polarity Plug Receptacle for Hubbell 6 Amp. | .56 | .63 | .70 |
| Attachment Plug Receptacle for Hubbell 6 Amp. | .77 | .85 | .91 |

FS SERIES FOR FLUSH DEVICES
Shallow Type Without Cover, Any Make

| No. Gangs | No. Pipe Outlets | Series | 1/2" | 3/4" | 1" |
|-------------|------------------|---------------------------|--------|---------|---------|
| Single Gang | One | FS-FSA | \$.91 | \$ 1.05 | \$ 1.19 |
| " | Two | FSC-FSL-FSR-FSLA-FSS-FSAA | 1.05 | 1.26 | 1.54 |
| " | Three | FSCA-FSCC-FSCT-FST | 1.40 | 1.75 | 2.03 |
| " | Four | FSX-FSCD | 1.68 | 2.10 | 2.38 |
| Two Gang | One | FS-FSA | 1.68 | 1.82 | 1.96 |
| " | Two | FSC | 1.82 | 1.96 | 2.17 |
| " | Three | FSD | 2.03 | 2.17 | 2.31 |

FS SERIES FOR FLUSH DEVICES—Continued

| No. Gangs | No. Pipe Outlets | Series | 1/2" | 3/4" | 1" |
|---------------|------------------|----------|------|------|------|
| 2 Gang Tandem | One | FS | 2.31 | 2.45 | 2.59 |
| " | Two | FSC | 2.45 | 2.59 | 2.73 |
| Three Gang | One | FS-FSA | 2.73 | 2.87 | 3.01 |
| " | Two | FSC | 2.87 | 3.01 | 3.15 |
| " | Four | FSD | 3.01 | 3.15 | 3.29 |
| Four Gang | One | FS-FSA | 3.15 | 3.29 | 3.43 |
| " | Two | FSC-FSSE | 3.29 | 3.43 | 3.57 |
| " | Five | FSD | 3.43 | 3.57 | 3.71 |

COVERS FOR FS FITTINGS

| Description | Single Gang | 2 Gang |
|--|-------------|--------|
| Metal Cover for Std. Flush Push Switches | \$.21 | \$.42 |
| " " " " Tumbler or Toggle Switches | .21 | .42 |
| " " " " Rotary Switches | .21 | .42 |
| Metal Cover for Single Flush Receptacle | .21 | .42 |
| " " " " Duplex Flush Receptacle | .42 | .84 |
| " " " " with Lift Cover | .84 | 1.68 |
| " " " " for Disapp. Door Receptacle | 1.12 | 2.24 |
| " " " " with 1/4 Metal Nipple | .40 | |
| " " " " " " | .54 | |
| " " " " " " | .56 | |
| Blank Metal Cover Sheet Steel | .14 | .28 |
| " " " " Cast-Iron | .35 | .70 |
| Porcelain Cover with Holes | .28 | |
| Cast Cover with Guard for Push Switches | .49 | .81 |

| Description | 3 Gang | 4 Gang |
|--|--------|--------|
| Metal Cover for Std. Flush Push Switches | \$.63 | \$.84 |
| " " " " Tumbler or Toggle Switches | .63 | .84 |
| " " " " Rotary Switches | .63 | .84 |
| " " " " Single Flush Receptacle | .63 | .84 |
| " " " " Duplex Flush Receptacle | 2.52 | 3.36 |
| " " " " with Lift Cover | | |
| " " " " for Disapp. Door Receptacle | | |
| " " " " with 1/4 Metal Nipple | | |
| " " " " " " | | |
| Blank Metal Cover Sheet Steel | .56 | .84 |
| " " " " Cast-Iron | 1.05 | 1.40 |
| Porcelain Cover with Holes | 1.40 | 1.96 |
| Cast Cover with Guard for Push Switches | 1.40 | 1.96 |

METAL COMBINATION PLATES FOR FS SERIES

| | |
|--|--------|
| 2 Gang for One Switch and one Sgle. or Duplex Receptacle | \$.70 |
| " " " " Bull's Eye with Ruby Glass | 1.75 |
| " " " " One Receptacle & one Bull's Eye | 1.96 |

NOTE: Although our prices on conduit fittings apply to all makes we use Crouse Hinds' numbers and lists for convenience.

G & H WITHOUT ADJUSTABLE BAR

| Type | 5 Amp. | 10 Amp. | 15 Amp. | 20 Amp. |
|-------------------------|--------|---------|---------|---------|
| Crouse Hinds or Similar | | | | |
| G..... | \$.56 | \$.70 | \$ 1.05 | \$ 1.19 |
| GL..... | .63 | .77 | 1.12 | 1.26 |
| GA-GLA-GT..... | .84 | .98 | 1.33 | 1.50 |
| GTA-GX..... | 1.05 | 1.19 | 1.68 | 1.82 |
| H..... | .42 | .56 | .91 | 1.05 |
| HA..... | .49 | .63 | .98 | 1.12 |
| HH..... | .56 | .70 | 1.05 | 1.19 |
| HHC..... | .84 | .98 | 1.33 | 1.50 |
| HLA..... | .63 | .77 | 1.12 | 1.26 |

G & H WITH ADJUSTABLE BAR

| Type | 5 Amp. | 10 Amp. | 15 Amp. | 20 Amp. |
|-------------------------|--------|---------|---------|---------|
| Crouse Hinds or Similar | | | | |
| G..... | \$.77 | \$.91 | \$ 1.26 | \$ 1.40 |
| GL..... | .84 | .98 | 1.33 | 1.50 |
| GA-GLA-GT..... | 1.05 | 1.19 | 1.68 | 1.82 |
| GTA-GX..... | 1.26 | 1.40 | 1.89 | 2.03 |
| H..... | .63 | .77 | 1.12 | 1.26 |
| HA..... | .70 | .84 | 1.19 | 1.33 |
| HH..... | .77 | .91 | 1.26 | 1.40 |
| HHC..... | 1.05 | 1.19 | 1.68 | 1.82 |
| HLA..... | .84 | .98 | 1.33 | 1.50 |

A two-sided advantage in the Nofuz Panelboard better for

You

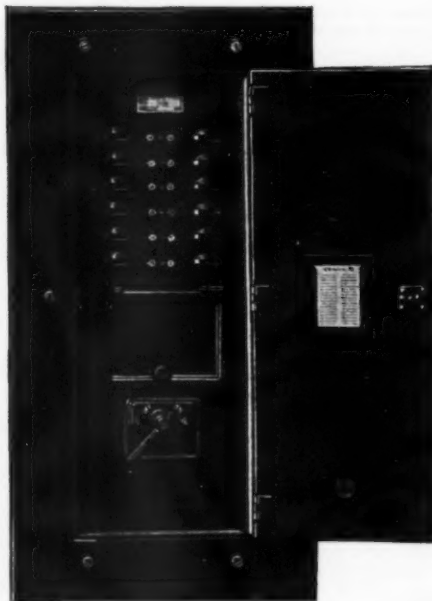


Users

WHEN those new wiring jobs are in prospect and competition is keener than ever before, what can you do to secure the installation and make a fair profit?

Perhaps by using cheap materials, but that doesn't help you on future jobs. There is another way to enhance your chances of bidding successfully—establish yourself as a user of the Westinghouse Nofuz panelboard. It costs only a little more and gives so much greater convenience and safety. Then too, the panelboard is only a fraction of the total wiring cost.

The nearest Westinghouse office will be glad to give you complete information on the new Nofuz panelboard—the modern lighting control that has no fuses in the branch circuits.



APERUSAL of the advantages of the Nofuz panelboard will prove that it is well worth its additional cost which is very slight as compared to the total wiring expense.

Here are some of the Nofuz features:

No fuses to change when overloads cause a circuit interruption. Just reclose the breaker in the same way a switch would be closed.

Inverse-time-limit characteristics prevent unnecessary tripping, but positively protect the circuit at all times.

The breaker cannot be held closed against an abnormal overload.

No live parts are accessible.

The panelboard can be mounted in any convenient place.

The calibration of the breaker cannot be altered nor its action blocked so as to remove its protective features.



WESTINGHOUSE ELECTRIC & MFG. COMPANY
BROOKLYN WORKS BROOKLYN, NEW YORK

SALES OFFICES AND SERVICE SHOPS IN ALL
PRINCIPAL CITIES OF THE UNITED STATES



Westinghouse

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Products for the Electrical Contractor include:

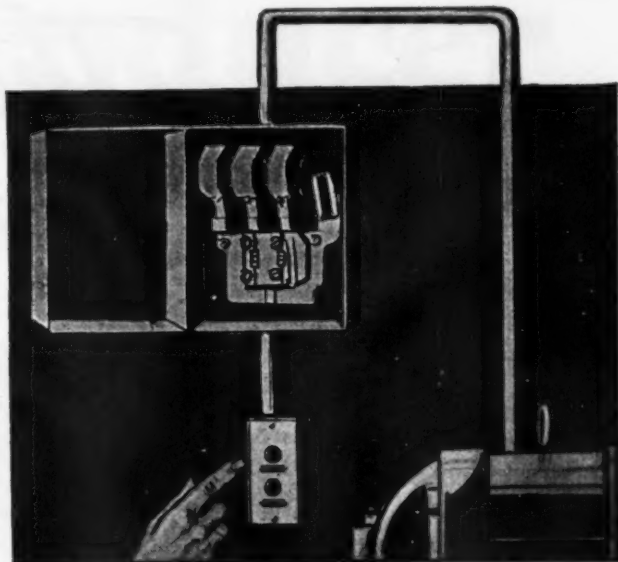
Circuit-breakers
Fans
Fuses
Insulating Materials
Mazda Lamps

Meters
Lighting Fixtures
Motors and Control
Panelboards
Ranges

Safety Switches
Solar Glow Heaters
Switchboards
Transformers
Water Heaters

ONLY

Westinghouse
LINESTARTERS
have the NEW



DEION Arc Quencher

TURNING the blinding arc-flash of an interrupted current into a mere glow, gives a longer lived, safer, more reliable motor-starter. The new Westinghouse Deion Linestarter does this.

One 75-ampere contactor, equipped with the Westinghouse Deion Arc Quencher, interrupted a short circuit current of 2500 amperes—successfully, repeatedly. More than three thousand percent of its rating!

A 7½-hp. Linestarter with the Westinghouse Deion

Arc Quencher performed 50 operations on a locked rotor 25-hp. motor after having performed 50 times on a 20-hp. motor, a 15-hp. motor and a 7½-hp. motor—50 times on each and all with locked rotor!

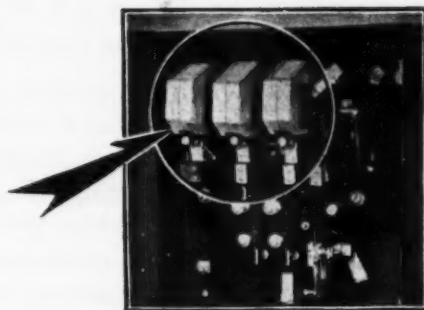
These, of course, were tests, but they indicate the factor of safety that is built into the Westinghouse Deion Linestarter.

Linestarters are made in sizes and types for across-the-line starting of motors from ¼ to 50 horsepower. All have the Westinghouse Deion Arc Quencher.

WESTINGHOUSE ELECTRIC & MANUFACTURING COMPANY
EAST PITTSBURGH PENNSYLVANIA
SALES OFFICES AND SERVICE SHOPS IN ALL PRINCIPAL CITIES

Westinghouse

T 30701

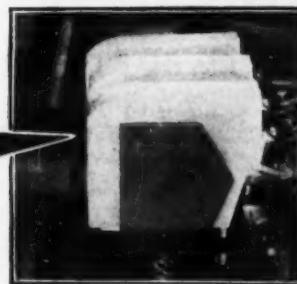


Interrupting a current of 320 amperes, 450 volts with the standard magnetic blowout—



and—

with the Westinghouse Deion Arc Quencher



A nation-wide chain of well-equipped and efficiently-manned Service Shops bring factory service within over-night shipping distance of every purchaser of Westinghouse products.



The World's of Safety Switches

Today SQUARE D Is Winning Leadership In Many Other Fields

Many years ago the Square D Company began manufacturing safety switches, for homes and for industrial use . . . with switches, Square D *pioneered* in "making electricity safe for everyone". As years passed, the name of Square D came to be accepted, throughout the nation, as a symbol of safety and a guarantee of unvarying quality.

Square D's switch production has constantly kept pace with the growth of the electrical industry . . . Square D has *held* the leadership it won through pioneering. Today more than 4,000,000 homes depend on Square D switches to permit the safe use of electricity. You will find thousands of Square D safety switches in every branch of industry, too.

Square D safety switches for homes comprise a complete line . . . and they meet every industrial need that arises. Adaptable to every operating condition, they provide the greatest degree of convenience, flexibility, safety and operating economy.

On its safety switches the Square D reputation was securely founded.

But today the Square D Company is national-

ly known as far more than a manufacturer of switches. From time to time as the company grew, new products were added to its line. SQUARE-Duct, the rigid suspension method for wiring—power and lighting panelboards—fuse cabinets—outdoor meter boxes—voltage testers—all these served to broaden Square D's service to the electrical industry.

Now, with its recent alliance with the Industrial Controller Company, Square D manufactures a **COMPLETE LINE** of electrical control equipment. There's practically no limit to the services Square D is now equipped to render. Strengthened through union . . . with many new products, and with the engineering genius of Industrial Controller collaborating with its own staff of experts . . . Square D is rapidly winning the high place in *every field* of electrical control equipment production that it has long enjoyed in the manufacture of switches.

A nation-wide organization of trained engineers is maintained by Square D . . . to serve *you*. Call on them at any time . . . at any of the three Square D factories or at any of the 24 branch offices.

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FACTORIES AT: DETROIT, MICH., PERU, IND., AND MILWAUKEE, WIS.
SQUARE D COMPANY, LTD., CANADA, WALKERVILLE, ONTARIO
BRANCH OFFICES: Toronto, Montreal

Square D Makes a COMPLETE Line of Electrical Control Equipment

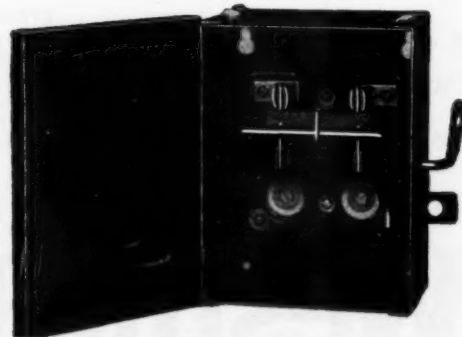
Switch and Panelboard Division, Detroit
Industrial Safety Switches
Meter Service Switches
SQUARE-Duct (the rigid suspension
method for wiring)
Panelboards for Both Lighting and
Power
Fuse Cabinets
Outdoor Meter Boxes
Voltage Testers

Industrial Controller Division, Milwaukee
Automatic Starters
Combination Starters (Automatic
Starters with Motor Circuit Switches)
Compensators, Both Automatic and
Hand Operated
Speed Regulators
Motor Circuit Switches
Magnetic Contactors
Pressure Switches
Disconnect Switches
Float Switches

Porcelain Division, Peru, Indiana
Porcelain Insulators
Special Porcelain Products



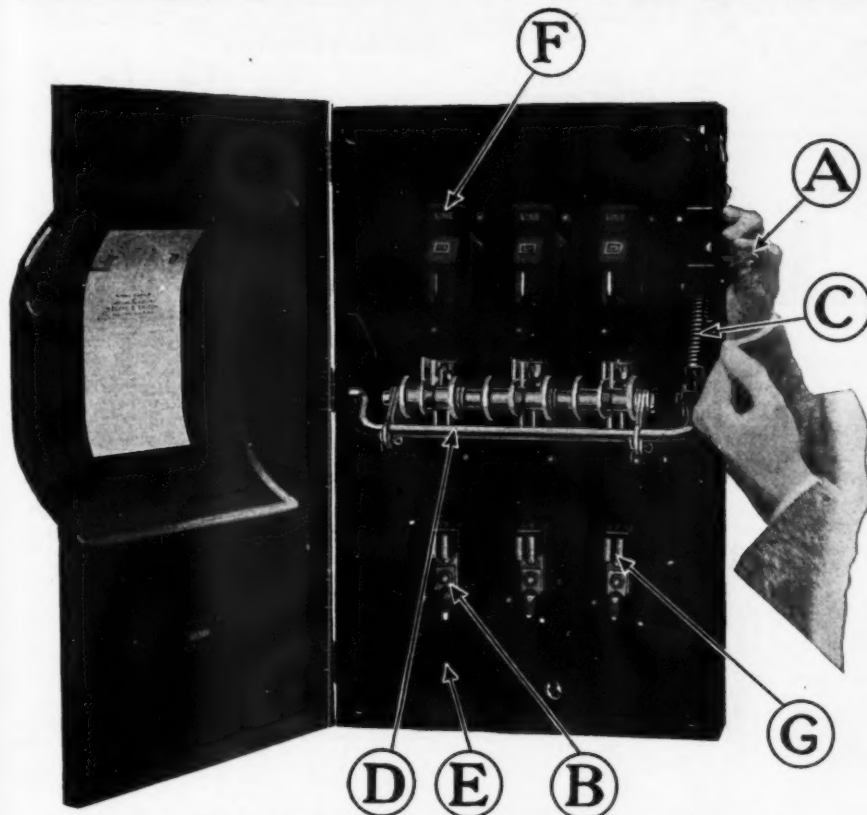
No. 99211 Domestic Service Entrance Switch, closed.



Open view of No. 99211 Service Entrance Switch, single throw, fusible, 2-pole, 125 volts.

FIRST Producer

... Still *the* LARGEST



Type A Safety Switch—Quick Make and Quick Break for Severe Industrial Service.

A. The Square D cover control makes it impossible to open the box cover while the switch is "on," and prevents operation of the switch when the cover is open. The cover control can be arranged to permit authorized persons to do both these things, allowing for competent inspection under load without interrupting the circuit. Type A switches can be furnished without cover control, if desired.

B. Each jaw and fuse clip is mounted on an individual base of insulating material. Parts can be removed from the front of the switch in a few minutes' time.

C. The Quick Make and Quick Break mechanism prevents arcing and burned contacts. The springs are operated in compression only, insuring long life. The mechanism is entirely enclosed within the box, away from clogging dust and dirt. Cam construction is so made that switches can be thrown entirely "on" or "off," even with a broken spring condition.

D. A heavy steel cross bar, insulated with formica sleeves, eliminates cross bar trouble. It cannot warp, char or get the switch blades out of alignment.

E. Generous wiring space provides speed and convenience in installation.

F. Protective covers for the line terminals may be had for switches, 30-ampere to 400-ampere inclusive. Attached easily even after the switch is installed. 600-volt switches are equipped with these covers.

G. Square D multi-spring jaws conform to any shape or size blade.

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SQUARE D

ELECTRICAL

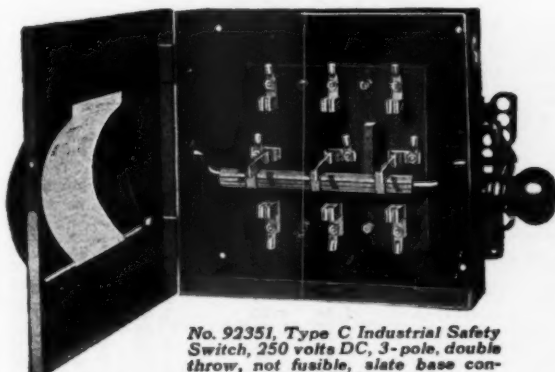


EQUIPMENT

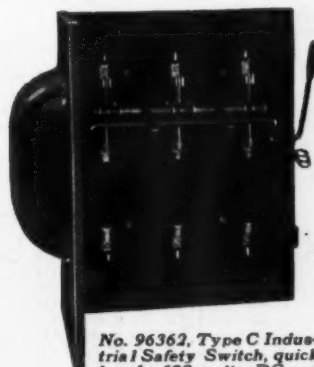
BRANCH OFFICES

Cincinnati
Chicago
Milwaukee
Minneapolis
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Kansas City
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Los Angeles
San Francisco
Portland

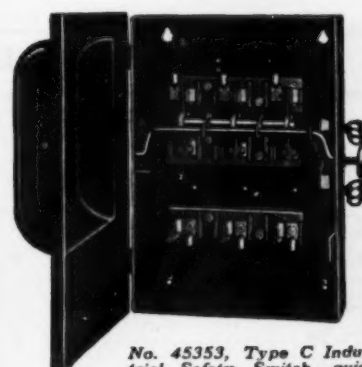
(149)



No. 92351, Type C Industrial Safety Switch, 250 volts DC, 3-pole, double throw, not fusible, slate base construction.



No. 96362, Type C Industrial Safety Switch, quick break, 600 volts DC and AC, 3-pole, single throw, fusible, slate base construction.



No. 45353, Type C Industrial Safety Switch, quick break, 250 volts DC and AC, 3-pole, single throw, fusible, closed end boxes.

Fittings, Conduit

| COVERS FOR G & H SERIES | | | | | | | | |
|-------------------------|------------------------|---------|---------|--------|---------------------|---------|--------|--|
| | Without Adjustable Bar | | | | With Adjustable Bar | | | |
| | 5 Amp. | 10 Amp. | 20 Amp. | 5 Amp. | 10 Amp. | 20 Amp. | 5 Amp. | |
| Porcelain..... | \$.28 | \$.35 | \$.56 | \$.21 | \$.21 | \$.49 | | |
| Blank Metal..... | .21 | .28 | .35 | .14 | .14 | .35 | | |
| Porcelain with "Nip" .. | .42 | .48 | .70 | .35 | .35 | .63 | | |
| " " " " | .49 | .56 | .77 | .42 | .42 | .70 | | |
| " " " " | .56 | .63 | .91 | .49 | .49 | .84 | | |
| Metal " " " " | .35 | .42 | .49 | .28 | .28 | .42 | | |
| " " " " | .42 | .49 | .56 | .35 | .35 | .49 | | |
| " " " " | .49 | .56 | .63 | .42 | .42 | .56 | | |

| | | |
|--|-------|--------|
| Lamp Receptacle with Shade Holder Groove No. H546..... | Each | \$.70 |
| Fixture Rosette Porcelain with $\frac{1}{4}$ Nipple No. H549 & H548..... | | 70 |
| No. H551 & H552..... | | 90 |
| Fixture Rosette Composition with $\frac{1}{4}$ Nipple No. H571 & H572..... | | 1.00 |
| Cord Rosette Porcelain H553..... | | .60 |
| Composition H554..... | | .70 |
| Lamp Receptacle—One Piece—No. H556 or 557..... | | .30 |

| | ^{1/2"} | ^{3/4"} | ^{1"} |
|------------------|-----------------|-----------------|---------------|
| A-JB-JU..... | .84 | \$1.05 | \$1.50 |
| L..... | .98 | 1.19 | 1.61 |
| T..... | 1.19 | 1.33 | 1.50 |
| X..... | 1.33 | 1.50 | 1.61 |
| K..... | 1.50 | 1.61 | 1.82 |
| KA-KB-KC-KD..... | .70 | .91 | 1.33 |
| | .84 | 1.05 | 1.50 |

| | |
|-----------------------------------|--------|
| Lamp Receptacle S. H. Groove..... | \$.63 |
| No S. H. Groove..... | .56 |
| Fixture Rosette with Nipple..... | .56 |
| Plug Receptacle 6 Amp..... | .70 |
| 20..... | .91 |
| Cord Rosette..... | .49 |
| Blank Cast Cover..... | .42 |

| Prices are for Iron Fittings and include Guard and Globe | | Form 75 |
|--|-----------------|--------------------|
| | $\frac{3}{4}$ " | $\frac{3}{4}$ " 1" |
| V-VA Complete as Above..... | \$5.85 | \$5.92 \$6.00 |
| VB-VC-VL Complete as Above..... | 5.98 | 6.11 6.24 |
| VCA-VLA-VT-VE-VS Complete as Above... | 6.17 | 6.30 6.56 |
| VTA-VX Complete as Above..... | 6.30 | 6.56 6.76 |
| VXA Complete as Above..... | 6.57 | 6.83 6.03 |
| VF-VK-VP Complete as Above..... | 6.37 | 6.50 6.63 |
| VD-VJ Complete as Above..... | 6.70 | 6.83 6.96 |
| Prices are for Iron Fittings and include Guard and Globe | | Form 200 |
| | $\frac{3}{4}$ " | $\frac{3}{4}$ " 1" |
| V-VA Complete as Above..... | \$7.02 | \$7.09 \$7.16 |
| VB-VC-VL Complete as Above..... | 7.15 | 7.28 7.35 |
| VCA-VLA-VT-VE-VS Complete as Above... | 7.28 | 7.50 7.63 |
| VTA-VX Complete as Above..... | 7.41 | 7.67 7.87 |
| VXA Complete as Above..... | 7.67 | 7.93 8.13 |
| VF-VK-VP Complete as Above..... | 7.48 | 7.60 7.73 |
| VD-VI Complete as Above..... | 7.67 | 7.80 7.93 |

| | Form 75 | Form 200 |
|--|------------|-------------|
| Guard with Half Metal Shade..... | \$3.90 | \$4.20 |
| " Gauge Metal Shade..... | 6.50 | 7.80 |
| " without Shade..... | 2.34 | 2.95 |
| Globes only, clear..... | 1.12 | 1.12 |
| " opal..... | 1.54 | 2.88 |
| " green-blue & orange..... | 2.38 | 3.30 |
| " ruby..... | 3.30 | 4.06 |
| Brass Reflector Holder Galv. Finish..... | 1.96 | 3.31 |
| Threaded Blank Covers Iron Black Finish..... | 1.05 | 1.40 |
| Sealing Plate Iron Galv. Finish..... | .21 | .35 |
| Receptacle with Gasket & Screws..... | .56 | .56 |

| | | |
|-------------------------------------|---------|----------|
| | Form 75 | Form 200 |
| | Iron | Brass |
| Pendant or Bracket Type Complete... | \$7.93 | \$8.80 |
| Receptacle Only..... | \$11.18 | \$12.42 |
| | | .50 |

NOTE: Above numbers and figures are for Crouse Hinds' make or similar

| Types Without Covers | 3/4" | 3/8" | 1" | 1 1/4" |
|-------------------------|--------|--------|--------|--------|
| A. | \$.46 | \$.62 | \$.84 | \$1.26 |
| B. | .53 | .70 | .95 | 1.47 |
| BB. | .95 | 1.23 | 1.79 | 2.74 |
| C. | .74 | .94 | 1.33 | 2.03 |
| CB. | 1.04 | 1.34 | 1.86 | 2.80 |
| D. | .74 | .94 | 1.29 | 2.03 |
| E. | .53 | .67 | .94 | 1.45 |
| LB-LF-LI-LR. | .81 | .98 | 1.40 | 2.17 |
| SE. | .81 | 1.09 | 1.71 | 2.66 |
| T-TL-TR. | 1.04 | 1.34 | 1.85 | 2.80 |
| TB. | 1.47 | 1.82 | 2.38 | 3.64 |
| U & UB. | .91 | 1.12 | 1.54 | 2.52 |
| X. | 1.33 | 1.82 | 2.45 | 3.43 |
| XB. | 2.03 | 2.52 | 3.29 | |

| Types Without Covers | 1 1/4" | 2" | 2 3/4" | 3" |
|-------------------------|--------|--------|---------|---------|
| A. | \$1.61 | \$3.15 | \$ 6.65 | \$ 8.10 |
| B. | 1.96 | 3.85 | 6.65 | 8.10 |
| BE. | 3.64 | 6.30 | 11.70 | 13.30 |
| C. | 2.66 | 5.11 | 8.55 | 11.15 |
| CB. | 3.85 | 6.16 | 9.90 | 14.30 |
| D. | 2.66 | 5.11 | 8.55 | 11.15 |
| E. | 1.96 | 3.85 | 6.65 | 8.00 |
| E-B-LF-LL-LR. | 2.94 | 5.18 | 8.80 | 11.60 |
| SE. | 3.99 | 7.00 | 11.85 | 14.85 |
| T-TL-TR. | 3.85 | 6.16 | 9.90 | 14.40 |
| UB. | 5.18 | 9.00 | ... | ... |
| U & UB. | 3.29 | 6.00 | 10.10 | 13.20 |
| XV. | 4.48 | 8.33 | 12.35 | 19.15 |

| | | | | |
|--------------------------|--------|--------|--------|--------|
| H Couplings..... | 1 1/2" | 3 1/2" | 1" | 1 1/2" |
| KO Box Connector..... | \$.32 | \$.48 | \$.83 | \$1.11 |
| NO " "..... | .20 | .29 | .67 | 1.34 |
| SCA Cable Connector..... | .24 | .31 | .56 | .84 |
| SLP Short Elbow..... | .13 | .17 | .24 | |
| KOL Box Connector..... | .39 | .52 | .83 | 1.00 |
| KOR Reducer..... | .43 | .57 | .98 | 1.54 |
| | .58 | .63 | | |
| H Couplings..... | 1 1/2" | 2" | 2 1/2" | 3" |
| KO Box Connector..... | \$1.54 | \$3.21 | \$4.00 | \$6.37 |
| NO " "..... | 1.18 | 2.49 | 3.28 | 4.30 |
| SCA Cable Connector..... | | | | |
| SLP Short Elbow..... | 1.23 | 2.66 | | |
| KOL Box Connector..... | 2.07 | 4.20 | | |
| KOR Reducer..... | | | | |

| | | | | | |
|---------------------------|--|--------|--------|--------|--------|
| | | 1 1/4" | 3/4" | 1" | 1 1/4" |
| Blank Metal..... | | \$.11 | \$.15 | \$.32 | \$.45 |
| Rubber Gasket..... | | .14 | .14 | .21 | .28 |
| Metal, 3/4 Nip..... | | .28 | .35 | .49 | .64 |
| " 3/4 "..... | | .32 | .39 | .53 | .69 |
| " 3/4 "..... | | .35 | .42 | .56 | .71 |
| " 3/4 "..... | | .42 | .49 | .63 | .78 |
| Porcelain with Holes..... | | .14 | .21 | .35 | .50 |
| Metal, Cord Grip..... | | .28 | .35 | .49 | |
| | | 1 1/4" | 2" | 2 1/4" | 3" |
| Blank Metal..... | | \$.63 | \$.78 | \$1.05 | \$1.05 |
| Rubber Gasket..... | | .28 | .56 | .84 | .84 |
| Metal, 3/4 Nip..... | | .81 | | | |
| " 3/4 "..... | | .85 | | | |
| " 3/4 "..... | | .88 | | | |
| " 3/4 "..... | | .95 | | | |
| Porcelain with Holes..... | | .67 | .84 | 1.12 | 1.12 |
| Metal, Cord Grip..... | | | | | |

| | | | | | | |
|---|-----|--------|---------------|---------------|-----------|--------|
| Lamp Recept. without Shade Holder Groove PR.... | 14" | \$.35 | 34" | \$.42 | 1" | \$.49 |
| with Shade Holder Groove PRS..... | | .42 | | .49 | | .56 |
| Porcelain for Weatherproof Socket WP2..... | | .28 | | | | |
| Polarity Plug Receptacle 10 Amp. P..... | | .56 | | .63 | | .70 |
| " " Duplex PD..... | | | | .70 | | .78 |
| Snap Switch 5 Amp. 125 Volt Non Indicating.... | | \$.70 | Sgle. Pole | Dble. Pole | 3 Pole | \$1.26 |
| " " 5 125 Indicating..... | | .77 | | | | |
| " " 10 125 Non-Indicating.... | | 1.12 | | \$1.47 | | 1.47 |
| " " 10 125 Indicating..... | | 1.26 | | 1.68 | | |

| Type | Any Make | | | Any Make | | |
|----------------|----------|--------|--------|----------|--------|--------|
| | 1 Gang | | | 2 Gang | | |
| | 1/2" | 3/4" | 1" | 1/2" | 3/4" | 1" |
| FSE-FSB..... | \$1.05 | \$1.26 | \$1.40 | \$1.82 | \$2.03 | \$2.24 |
| FSC-L & R..... | 1.33 | 1.61 | 2.03 | 2.10 | 2.31 | 2.66 |
| FST..... | 1.75 | 2.31 | 2.73 | | | |
| FSU..... | 1.26 | 1.61 | 2.03 | | | |
| FSD..... | 1.75 | 2.31 | 2.73 | 2.38 | 2.73 | 3.08 |

| Type | 3 Gang | | | 4 Gang | | |
|----------------|--------|--------|--------|--------|--------|--------|
| | 1/2" | 3/4" | 1" | 1/2" | 3/4" | 1" |
| FSE-FSB..... | | \$2.73 | \$3.01 | | \$3.36 | \$3.64 |
| FSC-L & R..... | | 3.08 | 3.36 | | 3.71 | 3.96 |
| FST..... | | | | | | |
| FSU..... | | | | | | |
| FSD..... | \$3.22 | 3.57 | 3.85 | \$4.27 | | |

| | One Gang | 2 Gang |
|---|-------------|-----------|
| Blank Metal Plate..... | \$.37 | \$.70 |
| Receptacle Plate..... | .28 | .38 |
| Toggle or Push Button Switch Plate..... | .38 | |

| Type | 5 Amp. | | 10 Amp. | | |
|----------|-----------------|-----------------|-----------------|-----------------|--------|
| | $\frac{1}{4}$ " | $\frac{3}{4}$ " | $\frac{1}{4}$ " | $\frac{3}{4}$ " | 1" |
| OA..... | \$.63 | \$.64 | \$.77 | \$1.05 | \$1.33 |
| OC..... | .77 | 1.05 | .91 | 1.26 | 1.68 |
| OCB..... | 1.19 | 1.54 | 1.33 | 1.75 | 2.24 |
| OE..... | .56 | .77 | .70 | .98 | 1.26 |
| OEB..... | .91 | 1.12 | 1.05 | 1.33 | 1.75 |
| OL..... | .91 | 1.12 | 1.05 | 1.33 | 1.75 |
| OLB..... | 1.19 | 1.54 | 1.33 | 1.75 | 2.24 |
| OT..... | 1.19 | 1.54 | 1.33 | 1.75 | 2.24 |
| OTB..... | 1.54 | 1.96 | 1.68 | 2.10 | 2.80 |
| OU..... | .77 | 1.05 | .91 | 1.26 | 1.68 |
| OUE..... | 1.19 | 1.54 | 1.33 | 1.75 | 2.24 |
| OX..... | 1.54 | 1.96 | 1.68 | 2.10 | 2.80 |
| OXB..... | 1.89 | 2.31 | 2.03 | 2.52 | 3.20 |

Fittings, Entrance

| T & B | | | | |
|---|--------|--------|--------|--------|
| | 1½" | ¾" | 1" | 1¼" |
| Ent. Cap 1525-32 with Cover..... | \$.40 | \$.45 | \$.65 | \$1.00 |
| Capped Elbow 1470-84 with Cover..... | .60 | .60 | .70 | 1.95 |
| Insulets 1610-11-12 with Cover..... | .15 | .20 | .25 | ..... |
| Angle Insulets 1640-1-2 with Cover..... | .30 | .45 | .60 | ..... |
| Cable Insulets 2000 with Cover..... | .15 | ..... | ..... | ..... |
| | 1½" | 2" | 2½" | 3" |
| Ent. Cap 1525-32 with Cover..... | \$1.70 | \$2.95 | \$6.25 | \$7.65 |
| Capped Elbow 1470-84 with Cover..... | 2.30 | ..... | ..... | ..... |
| Insulets 1610-11-12 with Cover..... | ..... | ..... | ..... | ..... |
| Angle Insulets 1640-1-2 with Cover..... | ..... | ..... | ..... | ..... |
| Cable Insulets 2000 with Cover..... | ..... | ..... | ..... | ..... |

ROUND "ADAPTI" BOXES

| Series Numbers | Style | 1½" | 3½" | 1" |
|---------------------------|---------------|--------|--------|--------|
| No. 2900 to 2903 | 1 Back Outlet | \$4.40 | \$4.48 | \$6.10 |
| No. 3000 to 3005 | 1 Side Outlet | .43 | .50 | .74 |
| No. 3100 to 3105 | " " " | .40 | .48 | .60 |
| No. 3100T & 3101T Thrls. | " " " | .48 | .55 | .. |
| No. 3170 to 3175 | " " " | .57 | .54 | .67 |
| No. 3200 to 3205 | 2 " " | .48 | .54 | .74 |
| No. 3200T & 3201T Thrls. | " " " | .60 | .68 | .. |
| No. 3270 to 3275 | " " " | .60 | .67 | .94 |
| No. 32170 to 32175 | " " " | .54 | .60 | 1.00 |
| No. 3300 to 3305 | 3 " " | .64 | .88 | .98 |
| No. 3300T to 3305T Thrls. | " " " | .82 | .95 | .. |
| No. 33170 to 33175 | " " " | .71 | .83 | 1.07 |
| No. 3400 to 3405 | 4 " " | .80 | 1.05 | 1.20 |
| No. 3500 to 3705 | 2 " " | .54 | .60 | .75 |
| No. 3800 to 3805 | " " " | .54 | .60 | .80 |
| No. 3900 to 4105 | 3 " " | .80 | .93 | 1.08 |
| No. 4800 to 5005 | 4 " " | .94 | 1.03 | 1.34 |

| Series Numbers | Style | 1¾" | 1½" | 2" |
|---------------------------|---------------|--------|--------|--------|
| No. 2900 to 2903 | 1 Back Outlet | \$1.10 | .. | .. |
| No. 3000 to 3005 | 1 Side Outlet | 1.30 | \$2.00 | \$2.70 |
| No. 3100 to 3105 | " " " | 1.10 | 1.80 | 2.40 |
| No. 3100T & 3101T Thrls. | " " " | .. | .. | .. |
| No. 3170 to 3175 | " " " | 1.15 | 1.85 | 2.66 |
| No. 3200 & 3205 | 2 " " | 1.25 | 2.13 | 2.70 |
| No. 3200T & 3201T Thrls. | " " " | .. | .. | .. |
| No. 3270 to 3275 | " " " | .. | 2.28 | 2.88 |
| No. 32170 to 32175 | " " " | 1.34 | 2.20 | 2.80 |
| No. 3300 to 3305 | 3 " " | 1.96 | 2.68 | 3.00 |
| No. 3300T to 3305T Thrls. | " " " | .. | .. | .. |
| No. 33170 to 33175 | " " " | 1.70 | 2.75 | 3.10 |
| No. 3400 to 3405 | 4 " " | 1.87 | 2.90 | 3.35 |
| No. 3500 to 3705 | 2 " " | 1.40 | 2.28 | 3.35 |
| No. 3800 to 3805 | " " " | 1.40 | 2.28 | 3.35 |
| No. 3900 to 4105 | 3 " " | 1.85 | 2.90 | 4.00 |
| No. 4800 to 5005 | 4 " " | 1.95 | 3.55 | 4.70 |

| Series No. | Description | 1/2" | 3/4" | 1" |
|-------------|---------------------------|--------|--------|--------|
| 500-501-502 | Base Only | \$.27 | \$.27 | \$.54 |
| 500X-501X | Extension Ring | .27 | .27 | .40 |
| 501A | Base Concealed to Expd. | .67 | .67 | .67 |
| 0500 | " with Tapped Boss | .34 | .34 | |
| 510 to 512 | Base | .40 | .40 | .80 |
| 520 to 522 | " | .27 | .27 | .54 |
| 530 | " | 1.80 | 1.80 | |
| 540 to 542 | " | .27 | .27 | .52 |
| 30 to 35 | Metal Side Plates | .14 | .14 | .20 |
| 40 to 42 | Insulated Side Plates | .16 | .16 | .34 |
| 50 to 54 | Armd. Flex. Side Plates | .34 | .43 | .52 |
| 60 to 65 | Angle Outlet | .16 | .24 | .43 |
| 70 to 75 | Elbow Outlet | .24 | .30 | .50 |
| 90 to 93 | Connecting Outlet | .28 | | .34 |
| 100 & 101 | Straight for No. 500 Base | .16 | .24 | |
| 110 to 113 | " " No. 501 " | .28 | .34 | .43 |
| 120 to 125 | " " No. 502 " | .47 | .53 | .67 |
| 130 to 135 | " " No. 503 " | 1.08 | 1.33 | 1.60 |
| 140 to 145 | " " No. 504 " | 2.67 | 3.08 | 3.48 |
| 300 & 301 | Threadless Outlet | .20 | .28 | |
| 310 & 311 | " " | .34 | .40 | |

| Series No. | Description | 1 1/2" | 1 3/4" | 2" |
|-------------|---------------------------|--------|--------|--------|
| 500-501-502 | Base Only | \$.54 | \$1.08 | \$1.08 |
| 500X-501X | Extension Ring | .40 | | |
| 501A | Base Concealed to Expd. | .67 | | |
| 0500 | " with Tapped Boss | | | |
| 510 to 512 | Base | .80 | 1.80 | 1.60 |
| 520 to 522 | " | .52 | 1.08 | 1.08 |
| 530 | " | | | |
| 540 to 542 | " | .52 | 1.08 | 1.08 |
| 30 to 35 | Metal Side Plates | .20 | .38 | .38 |
| 40 to 42 | Insulated Side Plates | .34 | .67 | .67 |
| 50 to 54 | Armd. Flex. Side Plates | .67 | | |
| 60 to 65 | Angle Outlet | .48 | .94 | 1.08 |
| 70 to 75 | Elbow Outlet | .55 | 1.00 | 1.14 |
| 90 to 93 | Connecting Outlet | | .40 | .47 |
| 100 & 101 | Straight for No. 500 Base | | | |
| 110 to 113 | " " No. 501 " | .48 | | |
| 120 to 125 | " " No. 502 " | .80 | .94 | 1.07 |
| 130 to 135 | " " No. 503 " | 1.88 | 2.14 | 2.40 |
| 140 to 145 | " " No. 504 " | 3.87 | 4.28 | 4.67 |
| 300 & 301 | Threadless Outlet | | | |
| 310 & 311 | " " | | | |

| Numbers | Description | Price |
|---------|---|-------|
| 1 | Porcelain One Hole Cover..... | \$.18 |
| 2 | Metal For Devices..... | .30 |
| 3 | Porcelain One Hole Cover..... | .30 |
| 4 | Porcelain..... | .22 |
| 5 & 6 | Porcelain with 1/4 Male or Female Nipple..... | .38 |
| 7 & 8 | " " " " " " | .53 |
| 9 & 10 | Malleable with 1/4 Male or Female Nipple..... | .30 |
| 11 & 12 | " " " " " " | .38 |

NOTE: For "Adapti" Entrance Fittings See Page PL-13.

"GROUNDULET" FITTINGS

Crouse Hinds—Appleton & Similar Type GCA

| | | |
|-----------------------|------------------------------|--------|
| Without Soldering Lug | | Price |
| Fitting No. | GCA-12 For 1/2" Conduit..... | \$.77 |
| " " " | -172 " " " with lug | .81 |

Type GCD

| Type GCD | | Price |
|---|--|--------|
| With Angle Adjustment | | |
| GCD-12 For 1/4" Conduit without Lug with one Strap..... | | \$.90 |
| GCD-172 For 1/2" Conduit with Lug with one Strap..... | | .95 |
| GCD-22 For 3/4" Conduit with Lug with two Straps..... | | 1.77 |
| GCD-32 For 1" Conduit with Lug with three Straps..... | | 2.61 |

Type GCE & GCEE

| Size of Conduit Outside Diameter of Water Pipe Number..... | Type Size & Galle | | | | | | | | | | | |
|---|-------------------|--------|----------|------------|--------|----------|------------|--------|----------|------------|-------|----------|
| | 1/2" | | 3/4" | | 1" | | 1 1/4" | | 1 1/2" | | 2" | |
| | With Strap | Clamp | Terminal | With Strap | Clamp | Terminal | With Strap | Clamp | Terminal | With Strap | Clamp | Terminal |
| Price..... | \$1.58 | \$1.80 | \$2.16 | \$2.97 | \$3.42 | \$4.14 | \$4.41 | \$5.00 | \$6.17 | | | |

Type GCE

| | | | |
|--------------------------|-------------|-------|--------|
| GCE-142 For 1/4" Conduit | without Lug | ..... | \$ .90 |
| GCE-242 " 3/4" " | with Lug | ..... | 1.04 |
| GCE-342 " 1" " | with Lug | ..... | 1.17 |

Type GC

| | | |
|----------------------|--------------------------------|--------|
| Type GC | | |
| For Open Ground Wire | | |
| GC-92 | Cast Brass with No. 4 Lug..... | \$.72 |
| GC-922 | " " " " 00 Lug..... | 1.44 |

GC BRASS BUSHINGS For Ground Fittings

| Size | 1/2" | 3/4" | 1" | 1 1/4" | 1 1/2" | 2" | 2 1/2" | 3" |
|----------------------|--------|--------|--------|--------|--------|--------|--------|---------|
| Without Cap Screw... | \$.10 | \$.13 | \$.20 | \$.24 | \$.31 | \$.46 | \$.84 | \$ 1.10 |
| With Cap Screw..... | .20 | .24 | .31 | .32 | .40 | .61 | 1.00 | 1.25 |

TERMINALS, LUGS, JUMPERS, CLIPS, ETC.

| | Price |
|---|--------|
| Soldering Lug GCA30 For GCA & GCD Fittings..... | \$.86 |
| Water Meter Shunt No. GC-192..... | 1.80 |
| Strap Clamp Terminal For Water Pipe $\frac{1}{2}$ " to $\frac{3}{4}$ " No. GCE-012..... | 1.04 |
| " " " " $\frac{1}{2}$ " to $4\frac{1}{2}$ " No. GCE-014..... | 1.26 |
| " " " " $\frac{1}{2}$ " to $6\frac{3}{4}$ " No. GCE-016..... | 1.62 |
| Conduit End Terminal $\frac{1}{4}$ " No. GCE1..... | .36 |
| " " " $\frac{3}{8}$ " No. GCE2..... | .50 |
| " " " $\frac{1}{2}$ " No. GCE3..... | .63 |
| Jumper Strap No. GC110..... | .36 |
| Threaded Plug Terminals, Iron No. GCE042..... | .15 |
| " " " " Brass No. 082..... | .72 |
| Jumper Cable No. GC800, Per Foot..... | .18 |
| Jumper for Bonding Conduit 8" Long, No. 808 Per Foot..... | .40 |
| " " " " 12" No. 812..... | .53 |
| Soldering Lug Brass for $\frac{1}{4}$ " Conduit No. 130..... | .20 |
| " " " " $\frac{3}{8}$ " or 1" No. 160..... | .30 |
| Soldering Lug Copper for Bushing $\frac{1}{4}$ " to 2"..... | .05 |
| " " " " 2 $\frac{1}{2}$ to 6"..... | .10 |
| Brass Stud Double End Fits Bushings $\frac{1}{4}$ " to 6" No. GC52..... | .20 |
| Soldering Clips for Bushings $\frac{1}{4}$ " to $1\frac{1}{2}$ "..... | .05 |
| " " " " 2" to 6"..... | .09 |
| Grounding Strap, No. GC100, Per Foot..... | .25 |
| Strap Clamp, Steel No. GC101..... | .35 |
| " " " " Brass No. GC102..... | .65 |

| For BX or Armored Cable | | Size of K. O. | Price Each |
|----------------------------|---|-------------------------------|---------------|
| Description | | | |
| Standard Squeeze Connector | $\frac{3}{8}$ - $\frac{1}{2}$ | $\frac{3}{8}$ - $\frac{1}{2}$ | \$.06 |
| " | Set Screw Connector $\frac{3}{8}$ - $\frac{1}{2}$ | $\frac{3}{8}$ - $\frac{1}{2}$ | .06 |
| " | Slip In Connector $\frac{3}{8}$ - $\frac{1}{2}$ | $\frac{3}{8}$ - $\frac{1}{2}$ | .06 |
| " | Duplex Connector $\frac{3}{8}$ - $\frac{1}{2}$ | $\frac{3}{8}$ - $\frac{1}{2}$ | .18 |
| <hr/> | | | |
| STRAIGHT | | | .18 |
| BOX | Squeeze | $\frac{1}{2}$ - $\frac{3}{4}$ | .18 |
| CONNECTORS | or | $\frac{1}{2}$ - $\frac{3}{4}$ | .30 |
| | Tangent | $\frac{1}{2}$ - $\frac{3}{4}$ | .30 |
| | Type | $\frac{1}{2}$ - $\frac{3}{4}$ | .65 |
| | | $\frac{1}{2}$ - $\frac{3}{4}$ | .85 |
| | | | 1.25 |
| <hr/> | | | |
| 90 DEGREE | | | .32 |
| ANGLE BOX | Squeeze | $\frac{1}{2}$ - $\frac{3}{4}$ | .40 |
| CONNECTOR | or | $\frac{1}{2}$ - $\frac{3}{4}$ | .75 |
| | Tangent | $\frac{1}{2}$ - $\frac{3}{4}$ | 1.00 |
| | Type | $\frac{1}{2}$ - $\frac{3}{4}$ | 1.25 |
| <hr/> | | | |
| 45 DEGREE | | | .32 |
| ANGLE BOX | Squeeze | $\frac{1}{2}$ - $\frac{3}{4}$ | .40 |
| CONNECTOR | or | $\frac{1}{2}$ - $\frac{3}{4}$ | .75 |
| | Tangent | $\frac{1}{2}$ - $\frac{3}{4}$ | 1.00 |
| | Type | $\frac{1}{2}$ - $\frac{3}{4}$ | 1.25 |
| <hr/> | | | |
| PANEL BOX | | | .35 |
| CONNECTOR | Straight Type With Locknut | $\frac{1}{2}$ - $\frac{3}{4}$ | .48 |
| | | $\frac{1}{2}$ - $\frac{3}{4}$ | .63 |
| | | $\frac{1}{2}$ - $\frac{3}{4}$ | .93 |
| | | $\frac{1}{2}$ - $\frac{3}{4}$ | 1.30 |
| | | $\frac{1}{2}$ - $\frac{3}{4}$ | 1.88 |
| | | | 2.58 |
| <hr/> | | | |
| COUPLINGS | | For $\frac{1}{2}$ Conduit | .36 |
| FOR | | $\frac{1}{2}$ - $\frac{3}{4}$ | .38 |
| FLEXIBLE | | $\frac{1}{2}$ - $\frac{3}{4}$ | .42 |
| STEEL | | $\frac{1}{2}$ - $\frac{3}{4}$ | .54 |
| CONDUIT | | $\frac{1}{2}$ - $\frac{3}{4}$ | .65 |
| | | $\frac{1}{2}$ - $\frac{3}{4}$ | .90 |
| | | $\frac{1}{2}$ - $\frac{3}{4}$ | 1.10 |
| | | $\frac{1}{2}$ - $\frac{3}{4}$ | 1.60 |

ELECTRICAL CONTRACTING

Fittings, Armored Cable

FITTINGS OR BOX CONNECTORS, ARMORED CABLE—Continued

| | | |
|---|------------------|------|
| COUPLINGS FOR RIGID TO FLEXIBLE CONDUIT | For 1/2" Conduit | .32 |
| | " 3/4" " | .44 |
| | " 1" " | .52 |
| | " 1 1/4" " | .72 |
| | " 1 1/2" " | .90 |
| | " 2" " | 1.37 |
| Bushings or Ferrules—Brass | | .02 |

FITTINGS FOR "OVALFLEX" ARMORED CABLE

| Number | Description | Price |
|----------------|---|-------|
| 2150-57-60-61 | Straps—Fasteners & Bushings | \$.02 |
| 2159 | Toggle with Wire Loop | .03 |
| 2176-2180-2154 | Set Screw Connector | .15 |
| 2179-2181 | Special Box Connector | .10 |
| 2155-2156 | 90 Degree Box Connector | .35 |
| 412-413 | Connector for Ovalflex to Metal Molding | .35 |
| 9050-S | Squeeze Connector | .10 |

HANGERS

FOR CABLE & CONDUIT
Minerallac

| Hangers | | | Price | | | Porcelain Bushings | | |
|---------|---------|--------------|-------|------|-------|--------------------|----------|-------|
| Mfgt. | Conduit | Lead Covered | Jap | Fin. | Gl v. | Mfgs. | For R.C. | Price |
| No. | Size | Cable Size | | | | No. | Cable | |
| 0 | 3/4" | No. 14 | .07 | .10 | 1 | 8-2-0 | | \$.10 |
| 1 | 1" | No. 1 to 4/0 | .08 | .11 | 2 | 3-0-4-0 | | .12 |
| 2 | 1 1/4" | 4/0 to 300 M | .10 | .12 | 3 | 250M-450M | | .13 |
| 3 | 1 1/2" | 500 to 750 M | .10 | .12 | 4 | 500M-700M | | .15 |
| 4 | 1 3/4" | 800 to 1125M | .14 | .15 | 5 | 750M-1000M | | .17 |
| 5 | 2" | 1500 M | .14 | .16 | 6 | 1125-2500M | | .24 |
| 6 | 2 1/4" | 2000 M | .16 | .18 | | | | |

ADJUSTABLE BEAM HANGERS

T & B or Similar

| | |
|---|------------|
| Type A Clamp Including Bolts Fits Flange 2 1/4" to 7 1/4" | Price Each |
| Type B & C Clamp Including Bolts Fits Flange 7 to 12" | .75 |
| Special Bolts | .10 |

Supports for above Hangers

| | | | | | | | | |
|-----------------------|------|------|-----|--------|--------|-----|--------|-----|
| For One Conduit Steel | 1/4" | 3/4" | 1" | 1 1/4" | 1 1/2" | 2" | 2 1/4" | 3" |
| " Two Conduit Mall. | .20 | .25 | .33 | .40 | .50 | .51 | .65 | .82 |
| " Four Conduit Mall. | .31 | .38 | | | | | | |

NOTE: For Price of Complete Hanger add Prices of Clamp & Supports.

HANGERS & PERFORATED BAR

Grabber

Perforated or Extension Bar

| | |
|-----------------------------------|------------|
| For 1/2 to 1 1/2 Conduit Per Foot | Price Each |
| " 2 to 3" | .05 |
| " 3 1/2 to 6" | .08 |

Hangers

| No. | Description | 1/2" | 3/4" | 1" | 1 1/4" |
|-----|---|-------|-------|-------|--------|
| 1 | Hinge Hanger with Extn. Bar & Lag Screw | \$.17 | \$.17 | \$.18 | \$.20 |
| 7 | Band Hanger Extn. Bar and Beam Clamp | .20 | .20 | .21 | .24 |
| 13 | Hinge Hanger, Socket and Beam Clamp | .32 | .32 | .35 | .36 |
| 200 | Band Hanger Only | .09 | .09 | .10 | .11 |

| No. | Description | 1 1/2" | 2" | 2 1/4" | 3" |
|-----|---|--------|-------|--------|-------|
| 1 | Hinge Hanger with Extn. Bar & Lag Screw | \$.23 | \$.25 | \$.26 | \$.31 |
| 7 | Band Hanger Extn. Bar and Beam Clamp | .25 | .28 | .30 | .31 |
| 13 | Hinge Hanger, Socket and Beam Clamp | .37 | .44 | .45 | .46 |
| 200 | Band Hanger Only | .12 | .14 | .16 | .17 |

Lag Screws—Beam Clamps & Beam Plates

| No. | Description | Each | Each |
|-----|--|-------|--------------|
| 19 | Flattened Lag Screw with Bolt—1/4" to 1 1/4" | \$.06 | 2" to 3" .07 |
| 20 | Threaded Lag Screw, no Bolt—1/4" to 1 1/4" | .06 | 2" to 3" .07 |
| 21 | Beam Plate with Bolt—1/4" to 1 1/4" | .05 | 2" to 3" .06 |
| 22 | Beam Clamp—Forged—with Bolt—1/4" to 1 1/4" | .16 | 2" to 3" .20 |

KNOBS, TUBES & CLEATS, PORCELAIN

KNOBS

| Type | Price Each | Without Screws |
|------------------------------|------------|----------------|
| No. 5 1/4 Split Knobs | \$.02 1/2 | \$.02 |
| 5 1/4 Solid Knobs | .03 | .02 1/2 |
| 5 1/4 Nailit | | |
| 5 1/4 Screwit | .04 | .02 1/2 |
| 4 & 4 1/4 Knobs Solid | .05 | .04 |
| No. 9419 Split 1 1/2 x 1 1/4 | | .07 |
| 9420 Split 2 x 2 1/4 | | .12 |
| 22 Victor Split | | .10 |
| 6061 Solid Teleph. 2 Groove | | .10 |
| 6062 | | .15 |

TUBES

| Diam. | 3' & under | 4' | 5' | 6' | 8' | 10' | 12' | 14' | 16' |
|--------|------------|-----------|-------|-------|-------|-------|-------|-------|-------|
| 1/2" | \$.01 | \$.01 1/2 | \$.02 | \$.03 | \$.08 | \$.17 | \$.24 | \$.32 | \$.40 |
| 3/4" | .01 1/2 | .02 | .03 | .04 | .10 | .18 | .26 | .35 | .43 |
| 1" | .04 | .05 | .06 | .07 | .13 | .21 | .30 | .38 | .47 |
| 1 1/4" | .06 | .08 | .09 | .11 | .11 | .25 | .34 | .43 | .52 |
| 1 1/2" | .10 | .12 | .13 | .15 | .18 | .29 | .39 | .49 | .59 |

CLEATS

2 & 3 Wire

Standard No. 334 2 & 3 Wire Unglazed Cleats without Screws Per Pair \$.03
Glazed .06

ONE WIRE CLEATS
B & D Type—2 Piece

| Old No. | Height | Length | Width | For Size Wire | Price Each |
|---------|--------|--------|--------|------------------|------------|
| 1A | 1 1/4" | 1 1/4" | 1 1/4" | 14 to 6 | \$.06 |
| 1 1/4A | 1 1/4" | 2 1/4" | 1 1/4" | 6 " 2 | .08 |
| 2A | 1 1/4" | 2 1/4" | 1 1/4" | 2 " 0 | .10 |
| 2 1/4A | 1 1/4" | 2 1/4" | 1 1/4" | 0 " 000 | .15 |
| 3A | 1 1/4" | 3 1/4" | 1 1/4" | 000 " 200,000 CM | .17 |
| 3B | 1 1/4" | 3 1/4" | 1 1/4" | 000 " 200,000 CM | .18 |
| 3 1/4B | 1 1/4" | 3 1/4" | 1 1/4" | 2 " 500,000 CM | .20 |
| 4B | 1 1/4" | 3 1/4" | 1 1/4" | 5 " 1,000,000 CM | .25 |
| 4 1/4B | 1 1/4" | 5 | 1 1/4" | 8 " 1,250,000 CM | .35 |

LOOM & L-SUNDRIES

LOOM, NON-METALLIC CONDUIT

| Size | 1/2" | 3/4" | 1" | 1 1/4" | 1 1/2" | 1 3/4" | 2" |
|----------------|-------|-------|-------|--------|--------|--------|-------|
| Price per Foot | \$.03 | \$.03 | \$.09 | \$.12 | \$.15 | \$.17 | \$.23 |

SOLDERING LUGS—One Hole

| For Wire Size | Amps. | Size Wire Hole | Price Each |
|---------------|-------|----------------|------------|
| No. 10 Under | 25 | 1/8" | \$.04 |
| 8 | 35 | 1/8" | .04 |
| 6 | 50 | 1/8" | .05 |
| 4 | 70 | 1/8" | .06 |
| 2 | 90 | 1/8" | .08 |
| 0 | 125 | 1/8" | .09 |
| 00 | 150 | 1/8" | .12 |
| 000 | 175 | 1/8" | .18 |
| 0000 | 225 | 1/8" | .21 |
| 250 M. C. M. | 237 | 1/8" | .36 |
| 400 M. C. M. | 325 | 1/8" | .51 |
| 450 M. C. M. | 362 | 1/8" | .70 |
| 500 M. C. M. | 400 | 1/8" | .73 |
| 600 M. C. M. | 450 | 1/8" | .76 |
| 800 M. C. M. | 550 | 1/8" | .96 |
| 1000 M. C. M. | 650 | 1/8" | 1.17 |

For 2-Hole Lugs

With Regular Stud Holes Add 50% To Above Prices.

CONDUIT LOCKNUTS

Also on Page PL-8

| Size | Price |
|--------|---------|
| 1/2" | \$.01 |
| 3/4" | .01 1/2 |
| 1" | .03 |
| 1 1/4" | .06 |
| 1 1/2" | .06 |
| 2" | .10 |
| 2 1/2" | .14 |
| 3" | .22 |
| 3 1/2" | .38 |
| 4" | .50 |
| 4 1/2" | .65 |

LINKS

For Chain

| | |
|---|-------|
| Non-Insulating Splicing Links—Any Make—Each | Price |
| Insulating | \$.05 |
| Luminous Acorns—See Page PL-4 and Page PL-18. | .15 |

MAIL BOXES

COUCH

No. 73 Tilting Mail Boxes Post Office approved per Receptacle. \$4.15

"TILTING" Speaking Tube Type

Series 7303 to 7309 and 73010 to 73012

| No. of Boxes | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 |
|--------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| Price ea. | 16.20 | 21.60 | 27.00 | 32.30 | 37.80 | 43.20 | 48.60 | 54.00 | 59.40 | 64.80 |

SINGLE GANG Non-Tilting

No. 78 or 780 with call button or speaking tube unit. Price each \$3.15

MOLDING, NATIONAL

MOLDING

| | |
|---|-------|
| Nos. 022 & 222 Molding For Two Wires—Per Foot | \$.10 |
| 033 & 044 Two to Four Wires—Per Foot | .11 |

FITTINGS

| No. | Description | Price Each | No. | Description | Price Each |
|----------|--------------------|------------|----------|-----------------------|------------|
| 200-201 | Bushing | \$.01 | 348 | Cord Rosette | \$.32 |
| 223 | Clip | .02 | 354 | Double Strap | .02 |
| 232 | Coupling | .04 | 355 | Ground Clamp | .05 |
| 234 | Cross | .45 | 356-7 | Keyless Socket | .65 |
| 235 | Tee | .24 | 360 | Conven. Outlet | .75 |
| 236 | 90 Deg. Elbow | .20 | 363 | 1/2" Plate | .35 |
| 237 | 45 " " | .20 | 363A | 1/2" Cover | .24 |
| 238-9 | 90 " " | .20 | 363B | 1/2" " | .28 |
| 245 | Single Strap | .02 | 363C | Yoke | .06 |
| 255 | Ground Clamp | .04 | 365A | 1/2" Base | .60 |
| 278 | Adaptor | .05 | 365B | 1/2" Cover | .30 |
| 300 | Adaptor | .08 | 365C | 1/2" Plate | .32 |
| 301 | Box Connector | .15 | 366 | 6" Canopy Base | .85 |
| 303 | Adaptor | .04 | 366A-B-C | 6" Covers | .50 |
| 315 | Connector | .35 | 370 | Blank Cover | .25 |
| 316 | 90 Deg. Coupling | .30 | 371-2-3 | Porcelain Cover | .25 |
| 317 | 90 " " | .30 | 376 | Corner Box | .45 |
| 321A & B | Rawl Plug | .04 | 377 | Adaptor | .10 |
| 323 | Joint Cap | .02 | 392 | Snap Switch | .85 |
| 332 | Coupling & Supp. | .05 | 396 | Pull Socket | 1.15 |
| 334 | Cross | .45 | 397 | Key 2 1/4" Base | .75 |
| 335 | Tee | .24 | 398 | Key 2" " | .50 |
| 336 | 90 Deg. Elbow | .22 | 399 | Keyless Sock. 2" Base | .50 |
| 337 | 90 " Ext. Elbow | .20 | 400 | Base for Socket | .50 |
| 337B | Cap for Elbow | .10 | 401 | Box Connector | .15 |
| 338 | 90 Deg Int. Elbow | .22 | 406 | Combinat. Fitting | .30 |
| 338B | Cap for Int. Elbow | .12 | 407 | Utility Box | .40 |
| 339 | Drop Cord Box | .37 | 412 | Connector | .24 |
| 341 | Junction Box | .40 | 413 | " " | .28 |
| 342 | Surface Box | .40 | 414-S | " " | .24 |
| 344 | Base Coupling | .04 | 419A&B | Toggle Bolt | .09 |
| 345 | Single Strap | .02 | 419C | " " | .10 |

the house of
1929
ought
to be wired
for the
conveniences
of
1939

WIRED
FOR THE
FUTURE
BY
SMOOTH ELECTRIC CO.

NON-METALLIC

- and the responsibility rests largely on your shoulders

ONE glance at the developments of the last ten years is ample evidence that the next ten will see more and more electricity used in every wired home.

But the building public does not realize this. Most of these people think that if they build up today they are taking care of tomorrow.

There lies both a responsibility, and an opportunity, for you.

Point out the fact that, by using Non-Metallic Sheathed Cable, it costs less to provide adequate circuits for the future. The adequately wired home is always worth more money.

Get in step with the "Old House Wiring Campaign" that your local Electrical League, or your central station, is running.

See to it that every new home you wire in 1929 is wired for 1939 with Non-Metallic Sheathed Cable.

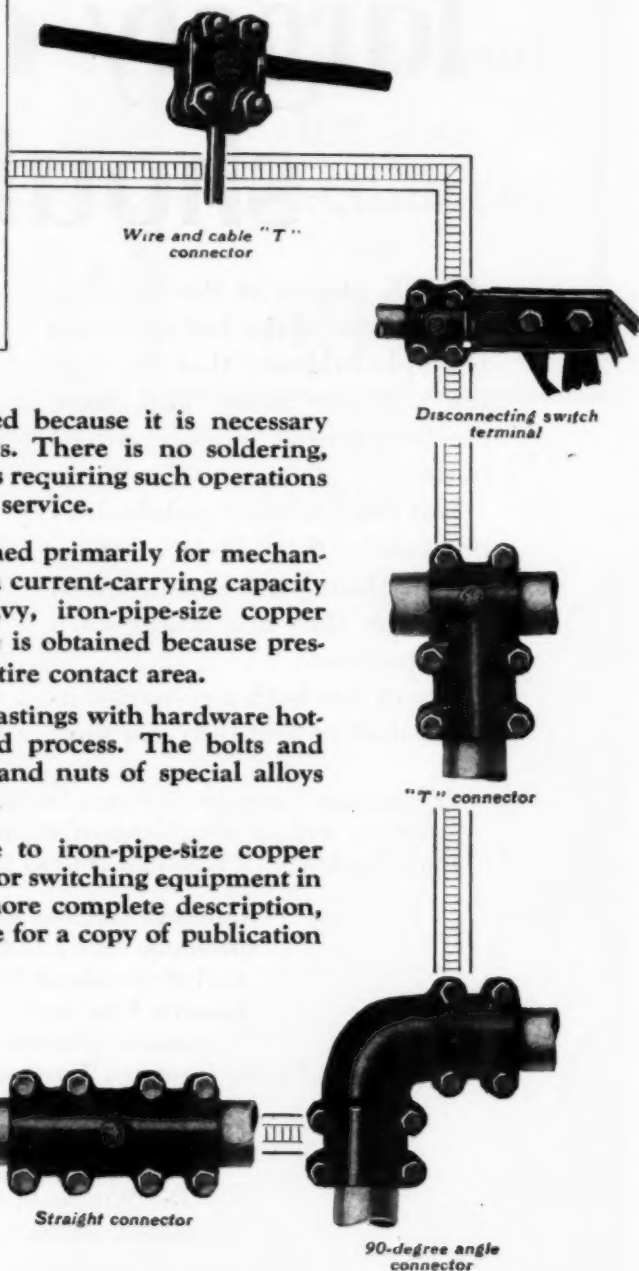
If you haven't complete information about Non-Metallic Sheathed Cable, write to any of the Licensed Manufacturers listed below, for the latest booklet—"Where and How to Use Non-Metallic Sheathed Cable."

American Circular Loom Company
Anaconda Wire and Cable Company
Collyer Insulated Wire Company
Eastern Tube and Tool Company
General Electric Company
Marion Insulated Wire and Rubber Company
National Metal Molding Division
National Electric Products Corporation
Rome Wire Company
Division of General Cable Corporation
The Wiremold Company
Triangle Conduit Company, Inc.

The above Manufacturers are Licensed under Non-metallic Sheathed Cable Patents number 1439323; 1520680; 1203788; 1673752.

SHEATHED CABLE

Bolted-type connector fittings reduce costly installation work



TIME and labor are saved because it is necessary only to tighten the bolts. There is no soldering, heating, or annealing. Fittings requiring such operations are not desirable for outdoor service.

Bolted-type fittings are designed primarily for mechanical strength. This produces a current-carrying capacity exceeding that of extra-heavy, iron-pipe-size copper tubing. Low temperature rise is obtained because pressure is developed over the entire contact area.

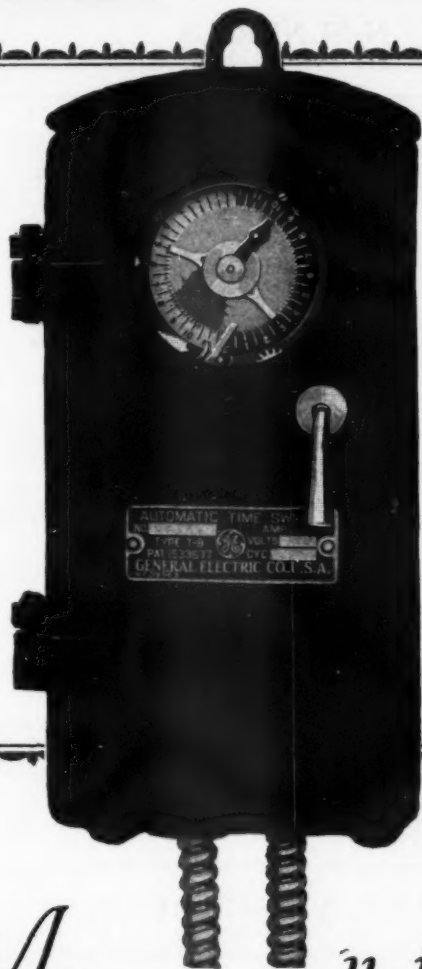
All fittings are copper-alloy castings with hardware hot-dip galvanized by a patented process. The bolts and nuts have a finger fit. Bolts and nuts of special alloys are furnished when specified.

These fittings are applicable to iron-pipe-size copper tubing, wire, cable, and outdoor switching equipment in all commercial sizes. For a more complete description, write to the nearest G-E office for a copy of publication GEA-286.

GENERAL ELECTRIC

GENERAL ELECTRIC COMPANY, SCHENECTADY, N. Y., SALES OFFICES IN PRINCIPAL CITIES

500-34



* *A time-controlled switch for turning circuits "on" and "off" automatically.*



The success of the motor-operated timing element, as embodied in these superior switches, has also been demonstrated by the Telechron. This popular springless electric clock is likewise accurately regulated from the power station.

Those who know the satisfaction of time-keeping electrically will insist upon these modern time switches*

YOU just set the *modern* clock in place and plug into a handy wall outlet—you don't need to wind it once a week.

The same refinement of operation is available in G-E time switches, which are unique in their field by reason of the same operating principle—a little electric motor running in step with the power supply.

What are the practical advantages? Accuracy beyond question. Reliability such as has established the general confidence in present-day electric service. Flexibility in locating the time-control device, because there is no winding to be considered. Freedom from the necessity of frequent periodic attention. And all because the G-E time switch is a *better switch, motor-operated*.

Available through G-E distributors. A postal card or letter to your G-E distributor or the nearest G-E office will bring full information.

GENERAL ELECTRIC

GENERAL ELECTRIC COMPANY, SCHENECTADY, N. Y., SALES OFFICES IN PRINCIPAL CITIES

621-8

PL-16

Molding

Plugs, Attachment

FITTINGS—Continued

| No. | Description | Price Each | No. | Description | Price Each |
|--------|----------------------|------------|------|----------------------------|------------|
| 420A&B | Spring Toggle Bolt | .08 | 441 | Single Plates 447-48-50- | |
| 420C | | .09 | | 451-61-91 | .13 |
| 421 | Lead Shield | .10 | 442 | Two Gang Plates 452-62-92- | .25 |
| 425A | Folding Strap | .02 | 443 | Three " 453-63-93 | .40 |
| 426 | Susp. Strap 2 Line | .04 | | | |
| 427 | " 3 | .05 | 441 | Single Adaptor | .60 |
| 428A | Folding Strap | .03 | 442 | Two Gang | 1.00 |
| 430 | Fixture Rosette | .60 | 500 | Bushing | .03 |
| 434 | Single Strap | .06 | 513 | 3 Gang Adaptor | 1.50 |
| 435 | Double Strap | .08 | 514 | " 4 | 2.00 |
| 436 | Coupling | .06 | 515 | " 5 | 2.50 |
| 437 | 45 Deg. Elbow | .20 | 516 | " 6 | 2.95 |
| 438 | Syle. Flush Box | .80 | 523 | " 3 Surface Box | 1.50 |
| 439 | " Surface Box | .70 | 524 | " 4 | 2.00 |
| 439S | " | .75 | 525 | " 5 | 2.50 |
| 440 | Two Gang Surface Box | 1.00 | 526 | " 6 | 2.95 |
| | | | 2155 | 90 Deg. Connect | .35 |
| | | | 2156 | 90 | .35 |

OVALDUCT

3 Wire.....Per Foot \$.18

OVALDUCT FITTINGS

| No. | Description | Price Each |
|---------|---------------------------------------|------------|
| 401 | Box Connector with 1/4" Locknut | .15 |
| 2133 | Squeeze Type Coupling 1 1/4" long | .15 |
| 2134 | 90 Degree Internal Elbow | .35 |
| 2135 | 45 " Flat | .27 |
| 2156 | 90 " Box Connector | .34 |
| 2159 | Wire Toggle Fastener | .03 |
| 2161 | Strap Fastener | .02 |
| 2181 | Connector Ovalduct to Oval Knockout | .10 |
| 2662 | Outlet Box 4 x 1/4" | .21 |
| 2663 | Extension Ring for Boxes | .20 |
| 2665 | Outlet Box 4 x 1/4" with Fixture Stud | .28 |
| 2862 | " 3 1/4 x 1/4" | .20 |
| 2865 | " 3 1/4 x 1/4" with Fixture Stud | .27 |
| 4170-S1 | Sectional Switch Box 4 x 1 1/4 x 1 | .38 |
| 4172-S1 | Spacer for above box | .34 |

MOLDING, WIREMOLD

MOLDING

| | | |
|---------------------|---------------|-------|
| No. 500 2-Wire, | price per ft. | \$.10 |
| " 700 4-Wire, | " " | .12 |
| " 1000 Master Size, | " " | .25 |

FITTINGS

| | For No. 500 2 Wire Size | For No. 700 4 Wire Size | For No. 1000 Master Size |
|---------------------------------|----------------------------|----------------------------|-----------------------------|
| Coupling | No. 501 \$.04 | No. 5701 \$.04 | No. 1001 \$.06 |
| Bushing | 502 .04 | 702 .04 | 1002 .04 |
| Supporting Clip | 503 .06 | 703 .06 | |
| Strap | 504 .04 | 704 .06 | 1005 .08 |
| Connecting Cover | 506 .04 | 706 .04 | |
| Multiple Strap | | 5707 .10 | |
| Ground Coupling or Clamp | 509 .12 | 709 .12 | 1009 .20 |
| Flat Elbow | 511-12 .22 | 711-12 .22 | 1011 .45 |
| Tee Plain | 515 .36 | 715 .36 | |
| Cross Plain | 516 .37 | | |
| Internal Elbow | 517 .26 | 717 .26 | 1017 .45 |
| Elbow Pull Box | | 5717A .50 | |
| External Elbow | 518 .22 | 718 .22 | 1018 .40 |
| Corner Box | 519 .37 | 719 .45 | |
| Narrow Case Fitting | | 5720 .55 | |
| One Piece Rosette | 521 .36 | 5721 .36 | |
| Two Piece Rosette and Block | 522 .60 | | |
| Fixture Rosette, 1 1/4" | 523 .70 | | |
| " 3/4" | 524 .65 | 5724 .65 | |
| Receptacle Base | 525 .70 | 5725 .70 | |
| Keyless Receptacle | 526 .90 | 5726 .90 | |
| Attachment Plug | 527 1.00 | 5727 1.00 | |
| Utility Box | | 5728-29 .36 | |
| Contact Block | | 5730 .30 | |
| Blank Cover | 531 .14 | 5731 .14 | |
| Outlet Box, 2 1/2" or 3" | 532-33 .45 | 5732-33 .45 | |
| Closed Extension Box | | 5734 .65 | |
| Distribution Box | | 5735 .70 | 1035 1.05 |
| Blank Cover | 536 .16 | 5736 .16 | |
| Extension or Fixture Box | 537-38 .65 | 5737-38 .65 | |
| " 6 1/2" | | 5739 & A .85 | |
| Combination Box | | 5745 .70 | |
| Switch or Recep. Box, Single | | 5747 .80 | |
| " 2 Gang | | 5747-2 1.05 | |
| " 3 Gang | | 5747-3 1.15 | |
| Surface Box, Single | | 5748 .90 | |
| " 2 Gang | | 5748-2 1.20 | |
| " 3 Gang | | 5748-3 1.25 | |
| Shallow Receptacle Box | | 5748S .70 | |
| Push Switch Box | 549 1.00 | 5749 1.00 | |
| " Shallow | 550 1.05 | 5750 1.05 | |
| Adaptor Plate and Cover, Single | 551 .70 | 5751 .70 | |
| " 2 Gang | 552 1.25 | 5752 1.25 | |
| " 3 Gang | 553 1.35 | 5753 1.35 | |
| Blank Extension Box | | 5760 .95 | |
| Box Connector | 581 .34 | 5781 & A .34 | |
| Conduit Coupling | 582 .38 | 5782 & A .38 | |
| Elbow Box Connector, 1/2" Male | 583 .38 | 5783 .38 | |
| Conduit Elbow, 1/2" Female | 584 .38 | 5784 .38 | |
| Combination Connector | 585 .25 | 5785 .25 | |
| Offset Connector | | 5786 .40 | 1086 .70 |
| Openwork Coupling | 588 .36 | 5788 .40 | |
| Kick Plate | | | 1087 .34 |

N-SUNDRIES

PIPE NIPPLES Made from Galvanized Wrought Iron Pipe

| Length | Size 1/4" | Size 3/8" | Size 1/2" | Size 3/4" | Size 1" | Size 1 1/4" | Size 1 1/2" | Size 2" |
|-------------------|-----------|-----------|-----------|-----------|---------|-------------|-------------|---------|
| Close Nipples | \$.06 | \$.06 | \$.06 | \$.07 | \$.10 | \$.14 | \$.17 | \$.20 |
| 2" to 3 1/2" Long | .10 | .10 | .10 | | | | | |
| 2 1/2" to 4" | | | | .12 | .15 | | | |
| 3" to 4 1/2" | | | | | | .21 | .28 | .35 |
| 4" Long | .11 | .11 | .10 | | | .22 | | |
| 5" " | .12 | .12 | .14 | .14 | .20 | .24 | .30 | .38 |
| 6" " | .14 | .15 | .15 | .17 | .22 | .28 | .34 | .40 |
| 7" " | .18 | .18 | .18 | .21 | .27 | .34 | .40 | .55 |
| 8" " | .20 | .20 | .21 | .23 | .30 | .37 | .45 | .60 |
| 9" " | .21 | .21 | .22 | .25 | .33 | .40 | .50 | .67 |
| 10" " | .23 | .23 | .24 | .27 | .37 | .40 | .58 | .75 |

NOTE RE NIPPLES—Above prices cover nipples made from ordinary Galvanized pipe as used by plumbers. If local rules call for nipples to be made from genuine conduit add the following:
For nipples made from genuine black conduit add 30% to above prices.
For nipples made from genuine Galvanized conduit add 40% to above prices.

CHASE NIPPLES & COUPLINGS

| Size | 1/4" | 3/8" | 1/2" | 3/4" | 1" | 1 1/4" | 1 1/2" | 2" | 2 1/2" | 3" |
|---------------------|-------|-------|-------|-------|-------|--------|--------|-------|--------|--------|
| Chase Nipples, each | \$.10 | \$.10 | \$.10 | \$.14 | \$.25 | \$.30 | \$.32 | \$.45 | \$.72 | \$1.05 |
| Couplings | .12 | .12 | .12 | .14 | | | | | | |

For Erickson Couplings, see Page PL-8.

CHASE MALE REDUCERS CHASE FEMALE ENLARGERS

T & B or Similar

| | | | |
|----------------------------|-------|------------------------------|-------|
| 1/4" to 1/2" Reducer, each | \$.20 | 1/2" to 3/4" Enlargers, each | \$.20 |
| 1/2" to 3/4" " " | .25 | 3/4" to 1" " " | .25 |
| 3/4" to 1" " " | .40 | 1" to 1 1/4" " " | .30 |
| | | 1 1/4" to 1 1/2" " " | .50 |

NAILS

Insulated

| | |
|--------------------------------------|-------|
| Millonite Insulated Nails, per dozen | \$.05 |
| Leather Nail Heads, " " | .05 |
| Staples Insulated, " " | .05 |

PLUGS, ATTACHMENT

ATTACHMENT PLUGS COMPLETE

| Style | Cap Composition | Blades Parallel | Price |
|----------------|-----------------|-----------------|-------|
| Pony Comp. | Metal Cov. | " | \$.15 |
| Standard Comp. | Comp. 1/2" | " | .25 |
| " | Comp. 3/4" | " | .25 |
| " | Metal Cov. | " | .30 |
| Bakelite Comp. | Composition | " | .35 |
| Polarized | " | Polarized | .25 |
| Large Size | " | Tandem | .55 |
| Heavy Duty | Brass Cov. | Polarized | 1.25 |
| Weatherproof | One Piece | None | .35 |

CAPS ONLY For Attachment Plugs

| Style of Cap Composition | Pony | Blades Parallel | Price |
|--------------------------|------|--------------------|-------|
| " Standard | | " | \$.10 |
| " " " | | " | .10 |
| Bakelite " " | | Polarized Parallel | .10 |
| " " " | | " | .20 |
| " " " | | " | .20 |
| Paraline Convertible | | Convertible | .40 |
| Composition Large | | Tandem | .20 |
| Metal Covered Pony | | Parallel | .15 |
| " Standard | | " | .15 |
| Brass " " | | " | .45 |
| " " " | | Polarized | .45 |
| " " Heavy Duty | | " | .40 |
| " " " | | Tandem | .50 |
| " " 20 Amp. | | " | .95 |
| Knostrain Composition | | Polarized | .95 |
| " Brass Covered | | Tandem | .85 |
| " " " | | " | .95 |
| Cord Grip Steel Covered | | " | .50 |
| " " " " | | Parallel | .50 |
| " " 3 Wire | | Polarized | .85 |

BODIES ONLY For Attachment Plugs

| | |
|----------------------------|-------|
| Pony Composition Body only | \$.10 |
| Standard " " | .15 |
| Bakelite " " | .20 |

Flasher Plugs

| | | | |
|--------------------------|-------|---------|-------|
| Diamond Flasher Button | \$.60 | | |
| Skeedoodle Plugs No. 125 | 2.50 | No. 161 | \$.80 |
| " No. 164 | .60 | No. 165 | .90 |

ELECTRICAL CONTRACTING

PLUGS, APPLIANCE

| Make | Number & Description | Price Each |
|-------------------|---|------------|
| American Beauty | 802-803 Plug Complete for Small Irons..... | \$.50 |
| " | 806 " " " Large Irons..... | 1.35 |
| " | 807 " " " Toasters & Stoves..... | .25 |
| Arrow | 6510 " " " with Switch..... | .90 |
| Beaver | F1 Gripall Super Type Adjust. Contacts..... | .45 |
| " | F4 " " " Nickel Alloy Contacts..... | .55 |
| " | F5 " " " Armored Case..... | .55 |
| " | F6 " " " Type Arm'd Case Nickel Alloy Cont..... | .60 |
| " | F7 " " " High Grade Bakelite..... | .60 |
| " | F22 Suitzall Double Contacts..... | .20 |
| " | F31 " " " Single Contacts..... | .15 |
| " | F32 " " " Double Contacts..... | .20 |
| " | F33 " " " Armored Case..... | .30 |
| " | F34 " " " Small Plug Bakelite..... | .30 |
| " | G-1 Gripall Small Adjust. Contacts..... | .90 |
| " | G-21 Push Button Type..... | .45 |
| " | G-22 New Toggle Type..... | .45 |
| Bryant | 668 Plug Complete with Switch..... | .85 |
| " | 752 " " " Shorter than 668..... | .65 |
| Cutler-Hammer | 7051 Plug Complete with Switch..... | .90 |
| Dover | 13 Up Connector Plug for 3 1/2 & 6 lb. Irons..... | .50 |
| " | 13 Switch Plug Complete..... | 1.00 |
| Hemco | 250 Heater Plug, no Switch..... | .45 |
| Hemco | Switch Appliance Plug..... | .80 |
| Hotpoint | CD6P1 Iron Plug..... | .45 |
| " | CD6P1 " " " Armored..... | .60 |
| " | CD7P1 " " " with Switch..... | 1.00 |
| Hubbell | 7020 Appliance Switch Plug..... | .90 |
| Kool-Pull (Colts) | Appliance Plug, no Switch..... | 1.00 |
| " | " " " with Switch..... | 1.25 |
| Liberty | 932 Heater Plug..... | .35 |
| Plugall | 9 Appliance Plug with Spring..... | .30 |
| " | 700 " " " Switch..... | .85 |
| Propp | 55 One 4 All Appliance Plug, no Switch..... | .30 |
| " | 55 Standard Iron Plug, no Switch..... | .25 |
| " | 56 Armored..... | .55 |
| " | 52 Iron Plug with Switch..... | .55 |
| P & S | 1550 Appliance Switch or Pendant..... | .90 |
| Reynolite | 500 Reynolite Connector Plug, no Switch..... | .50 |
| " | 510 " " " with Switch..... | .85 |
| Rodale | P-21 Appliance Plug No Switch..... | .25 |
| " | P-20 " " " Armored..... | .30 |
| " | 610 " " " Bakelite No Switch..... | .30 |
| " | 615 " " " " Armored..... | .45 |
| " | 850 " " " With Switch..... | .65 |
| " | 800 " " " Armored With Switch..... | 1.00 |
| Security | 151 Security Appliance Plug, no Switch..... | .40 |
| Simplex | 890 Armored Appliance Plug, no Switch..... | .75 |
| Sunbeam | Heater Plug..... | 1.50 |
| Torrid | B-060-3-4-5-6 Safety Control Plug..... | 1.00 |
| " | B-080-3-4-5-6 Heat Control Plug..... | 1.00 |
| Westinghouse | 299423 Plug Complete, no Switch..... | .75 |
| " | 373656 " " " with Switch..... | 1.00 |
| White Cross | White Cross Heater Plug, no Switch..... | .50 |
| " | " " " with Switch..... | .90 |

PANEL BOARDS OR FUSE CABINETS

BULLDOG FUSENTERS

| No. | Description | 2 Circ. | 4 Circ. | 6 Circ. | 8 Circ. | 12 Circ. |
|--|--|---------|---------|---------|---------|----------|
| CBS | Surface Black Finish with inside shield | \$1.85 | \$2.35 | \$3.95 | \$7.10 | \$10.40 |
| BOS | " " " Black Finish without Shield | 1.70 | 2.20 | ..... | ..... | 11.80 |
| BF | Flush Luminized Finish | 2.50 | 3.75 | 5.40 | 8.80 | 11.80 |
| BBF | " " " Black Finish | 2.00 | 2.75 | 4.75 | ..... | ..... |
| BSF | " " " Lum. Finish with Toggle Switches | ..... | 6.65 | 10.00 | 13.30 | 20.00 |
| BSS | " " " Lum. Finish with one 30 A. Saftofuse | ..... | 20.60 | 22.00 | 32.00 | 35.25 |
| BSS | " " " Lum. Finish with one 60 A. Saftofuse | ..... | 21.60 | 22.50 | 32.35 | 35.65 |
| BKF | " " " Lum. Finish Combined Fusenter & Pull Box | ..... | 6.65 | 10.00 | 15.00 | 20.00 |
| Combinations—For Resale Prices on all other Fusenter Combinations deduct 17% from Bulldog Co.'s List Prices. | | | | | | |

All Steel Equipment Co., FUSE CABS

| Style & No. | Description | 2 Circ. | 4 Circ. | 6 Circ. | 8 Circ. | 12 Circ. |
|--------------|--|---------|---------|---------|---------|----------|
| C-702-4-6 | Surface Small Type | \$1.75 | \$2.45 | \$3.75 | ..... | ..... |
| C-902-4-6 | Flush Small Type | 2.20 | 2.85 | 4.95 | ..... | ..... |
| Series D | Surface Type Sgl. Fuse | ..... | 3.20 | 5.10 | \$7.50 | \$10.10 |
| 3004 to 3074 | Not for Branch Switch | ..... | ..... | ..... | ..... | ..... |
| 3034 to 3094 | Flush Type | ..... | 3.75 | 5.60 | 9.00 | 12.10 |
| 4002 to 4012 | Not for Branch Switch | ..... | ..... | ..... | ..... | ..... |
| 4002 to 4012 | Surface Type Dbl. Fuse | 3.20 | 5.10 | 10.10 | 23.00 | 36.00 |
| 4022 to 4032 | Flush Type Dble. Fuse | 3.75 | 9.00 | 12.10 | 27.00 | 45.00 |
| Series DS | Not for Branch Switch | ..... | ..... | ..... | ..... | ..... |
| 3300 & 4300 | Flush or Surface-Sgle. Fuse Trims for Tog. Sw. | ..... | 6.90 | 9.25 | 13.80 | 21.00 |
| 3500 & 4500 | Flush or Surface-Dble. Fuse Trims for Tog. Sw. | 6.90 | 9.25 | 21.00 | 34.50 | 70.00 |

TRUMBULL—CIRCLE T Residence Panel Boards

| Surface or Flush Mounting | 4 Circ. | 6 Circ. | 8 Circ. | 10 Circ. | 12 Circ. |
|-------------------------------------|---------|---------|---------|----------|----------|
| Single No. 3104 to 3212 Flush Mtg. | ..... | ..... | ..... | ..... | ..... |
| Or Fusing 2906 to 2912 Surface Mtg. | \$2.85 | \$4.60 | \$9.75 | \$11.30 | \$13.00 |
| Double No. 3404 to 3412 Flush Mtg. | ..... | ..... | ..... | ..... | ..... |
| Or Fusing 2704 to 2712 Surface Mtg. | 9.15 | 12.45 | 18.25 | 23.25 | 26.60 |

August, 1929

CUTLER-HAMMER (T-V)

Fuse Panels—For Flush Mounting

| Number of Circuits | 2 | 4 | 6 | 8 | 12 |
|---------------------|----------------------|--------|--------|--------|---------|
| Black Enamel Finish | No. 2B to 12B \$1.90 | \$2.60 | \$4.70 | \$8.25 | \$10.25 |
| Aluminum Finish | No. 2A to 12A 2.45 | 3.45 | 5.40 | 8.70 | 11.70 |

SQUARE D Fuse Cabinets

| Series | 2 Circ. | 4 Circ. | 6 Circ. | 8 Circ. | 10 Circ. | 12 Circ. |
|----------------------------|---------------|---------------|---------------|---------------|---------------|----------------|
| Series 37000 to 39000 | Circt. \$1.85 | Circt. \$2.50 | Circt. \$4.50 | Circt. \$7.90 | Circt. \$9.60 | Circt. \$11.25 |
| Flush Series 37000 Black | 2.35 | 3.35 | 5.20 | 8.30 | 10.00 | 11.25 |
| " " 37000 Aluminum | 1.85 | 2.50 | 4.50 | 7.90 | 9.60 | 11.25 |
| Surface Series 39000 Black | ..... | ..... | ..... | ..... | ..... | ..... |

NOTE: 2 & 4 Circuit Flush Type are also available with channels for Lath Ends for mounting direct to front side of studding. For these cabinets add to Resale Price each.....\$0.20

WESTINGHOUSE Junior Residence Type

| Galvanized or Gray Box | 2 Circ. | 4 Circ. | 6 Circ. | 8 Circ. | 10 Circ. | 12 Circ. |
|--|---------|---------|---------|---------|----------|----------|
| Junior Residence Panels | ..... | ..... | ..... | ..... | ..... | ..... |
| No. K-64012-21 & 64052-61 | \$1.70 | \$2.50 | \$4.50 | \$6.65 | \$7.90 | \$10.00 |
| Junior Branch Fuse Attach | ..... | ..... | ..... | ..... | ..... | ..... |
| No. K-62398 & 62399 | 1.75 | 2.60 | ..... | ..... | ..... | ..... |
| Jun'or Building Panels for Toggle Switches | ..... | ..... | ..... | ..... | ..... | ..... |
| No. K-64034-42 & 64074-81 | ..... | 6.65 | 10.00 | 13.30 | 16.60 | 20.00 |

DIAMOND PANELETTES

| Surface Type | | | | Flush Type | | | |
|--------------|----------|----------------|--------|------------|----------|----------------|--------|
| No. | Circuits | Size | Price | No. | Circuits | Size | Price |
| B-4 | 4 | 7x7x3 | \$2.15 | F-4 | 4 | 8x10 1/4x3 1/4 | \$3.30 |
| S-4 | 4 | 8x10 1/4x3 1/4 | 2.50 | F-6 | 6 | 8x12x3 1/4 | 4.45 |
| S-6 | 6 | 8x12x3 1/4 | 3.50 | F-8 | 8 | 8x13 1/4x3 1/4 | 8.25 |
| S-8 | 8 | 8x13 1/4x3 1/4 | 6.85 | F-10 | 10 | 8x15 1/2x3 1/4 | 9.75 |
| S-10 | 10 | 8x15 1/2x3 1/4 | 7.40 | F-12 | 12 | 10x18x3 1/4 | 11.15 |
| S-12 | 12 | 10x18x3 1/4 | 9.90 | ..... | ..... | ..... | ..... |

Toggle Flush Type

| No. of Circuits | 4 | 6 | 8 | 10 | 12 |
|-----------------|--------|--------|---------|---------|---------|
| Cat. Number | FS-4 | FS-6 | FS-8 | FS-10 | FS-12 |
| Price | \$6.60 | \$9.90 | \$14.85 | \$17.30 | \$19.80 |

P-SUNDRIES

RUNNING THREAD, PIPE

| Price per Foot | 3/4" | 1" | 1 1/4" | 1 1/2" |
|----------------|-------|-------|--------|--------|
| ..... | \$.25 | \$.30 | \$.35 | \$.45 |

SOLDERING PASTE

(Also on Page PL-25.)

| Make | 2 Oz. Cans | 2 Oz. Tubes | 4 Oz. Cans | Half Pound Cans | One Pound Cans |
|----------|------------|-------------|------------|-----------------|----------------|
| Allen | ..... | ..... | ..... | ..... | ..... |
| Burnley | \$.30 | \$.40 | \$.55 | \$.90 | \$1.60 |
| Crescent | .20 | ..... | .30 | .40 | .70 |
| G. E. | .25 | ..... | .35 | .55 | 1.00 |
| Highland | .20 | ..... | ..... | .80 | 1.50 |
| Nokorode | .30 | ..... | ..... | .80 | 1.50 |

PAINT & VARNISH

Insulating

| Make | Per Pint | Per Quart | Per Half Gallon | Per Gallon |
|-----------------------------|----------|-----------|-----------------|------------|
| Armafac | ..... | ..... | ..... | ..... |
| Ajax Varnish No. 25 | \$.55 | \$1.00 | \$1.75 | \$3.00 |
| Enamelac | .40 | .75 | 1.35 | 2.20 |
| G. P. Black or Clear | .45 | .80 | 1.45 | 2.60 |
| Lustorac | .40 | .75 | 1.35 | 2.20 |
| Voltoac Quick Drying | .40 | .75 | 1.35 | 2.20 |
| W. F. Black Insulating | .40 | .75 | 1.35 | 2.20 |
| P. & B. No. 2 Paint | .55 | 1.00 | 1.75 | 3.00 |
| Pothead Compound, per Pound | ..... | ..... | ..... | \$.55 |

For Pipe Straps, see Page PL-25. For Solder, Sticks, etc., Page PL-25.

PLATES & PLUGS, RECEPTACLE

PLATES

For Flush Receptacles

| Stand. Recep. Plate Single or Duplex | .040 Thick Sprayed B. Brass | .060 Thick Sprayed B. Brass |
|--------------------------------------|-----------------------------|-----------------------------|
| ..... | \$.15 | \$.20 |
| Lift. Cover Pl. Single | .30 | .40 |
| Lift. Cov. 2 Gang | .50 | .60 |
| Combination Switch & Receptacle | ..... | .55 |
| Disappearing Door Plate Single | ..... | .70 |
| Duplex | ..... | 1.10 |

SUNDRY PLATES

For Receptacles

| | | |
|---|-------|--------|
| Bakelite or Composition Plate Single or Duplex Each | ..... | \$ .20 |
| 2 Gang Combination Plate Each | ..... | .40 |
| Guth Porcelain Plate for Single or Duplex Receptacle | ..... | .30 |
| Mirror Glass Single Plate \$1.00—Duplex \$1.75—3 Gang | ..... | 2.50 |
| Bryant Wood Inlaid One Gang For Single or Duplex Receptacle | ..... | 2.25 |
| De Luxe All Metal | ..... | .85 |
| Hubbell Bakelite Screwless Plate | ..... | .50 |
| Brass Single Plate for 30 Amp. Receptacle 7072 & 7114 | ..... | 1.50 |

| Style of Cap | | Blades | Price |
|-------------------------|----------------------|-----------|-------|
| Composition | Pony Standard | Parallel | \$ |
| " | " | Polarized | .10 |
| " | Bakelite | Parallel | .10 |
| " | Large Type | Tandem | .20 |
| " | Large Type 10 Amp. | Polarized | .40 |
| " | " " 20 " " | " | .45 |
| " | " " 30 " " | " | 1.50 |
| " | 3 Wire | " | .45 |
| " | 3 " 20 " " | " | .65 |
| " | 3 " 30 " " | " | 1.25 |
| " | Disapp. Door Plug | " | .70 |
| Brass Covered | Standard 10 A. | Parallel | .45 |
| " | " " 10 A. | Polarized | .45 |
| " | " " Heavy Duty 10 A. | " | .85 |
| " | " " Heavy Duty 10 A. | Tandem | .50 |
| " | " " Heavy Duty 20 A. | Polarized | .95 |
| " | 3 Wire 20 A. | " | 1.00 |
| Steel Covered | 3 Wire 30 A. | " | 2.25 |
| " | " 2 " 30 A. | " | 1.85 |
| Knostrain Composition | " | Parallel | .45 |
| " | Brass Covered | " | .95 |
| " | " | Tandem | .85 |
| " | " | " | .95 |
| " | Heavy Duty | " | .65 |
| Cord Grip Steel Covered | " | " | .50 |
| " | " | Parallel | .50 |
| " | " | Polarized | .50 |
| " | 3 Wire 10 Amp. | " | .85 |
| " | 3 Wire 20 Amp. | " | .60 |
| " | 3 Wire 30 Amp. | " | 1.70 |

Plates Extra

| Without Plates | | Plates Extra | | Price |
|----------------|------------------|--------------|-------|-------|
| Shallow | Comp. Side Wired | Single | ..... | \$.25 |
| " | " | Duplex | ..... | .35 |
| " | Porc. | " | " | .25 |
| " | " | Duplex | ..... | .35 |
| Deep | Comp. Top | Single | ..... | .45 |
| " | " | Duplex | ..... | .65 |
| " | Porc. | " | " | .45 |
| " | " | Duplex | ..... | .65 |

SUNDRY RECEPTACLES
Plates Extra Except Where Marked "X"

| Plates Extra Except Where Marked | | | | Price |
|----------------------------------|--|-------------|--|-------|
| For Lift Cover Plate Single..... | | | | \$.65 |
| Duplex..... | | | | .80 |
| 1 | With Rd. Met. Cvr. For 3 1/4 Box | Single..... | | .30 |
| 1 | " " " " " " | Duplex..... | | .40 |
| 1 | " " " " " " | Single..... | | .45 |
| 1 | " " " " " " | Duplex..... | | .35 |
| 1 | With Rd. Brass Plate Small Single..... | | | .50 |
| 1 | " " " " " Large..... | | | 1.25 |
| 1 | Edison Screw Base Recp. Single..... | | | 1.35 |
| 1 | Disappearing Door Recp. Single..... | | | .25 |
| 1 | " " " " Duplex..... | | | .75 |
| 1 | Screwless Plate Recp. Single..... | | | 1.10 |
| 1 | " " " " Duplex..... | | | .30 |
| 10 | Amp. Polariz. For 2 Wire Single..... | | | .65 |
| 20 | " " " " " " | | | 1.30 |
| 30 | " " " " " " | | | 2.90 |
| 10 | " " " " " " | | | 1.45 |
| 20 | " " " " " " | | | 1.60 |
| 30 | " " " " " " | | | 4.75 |

| Nos. | Connections | Price | |
|------|--|-------|----------|
| | | Brass | Bakelite |
| 134 | Several loud speakers | 2.50 | 2.60 |
| 135 | Loud speaker | 1.00 | 1.10 |
| 136 | Aerial & ground | 1.00 | 1.10 |
| 137 | Battery (with plug) | 2.50 | 2.60 |
| 138 | Electrical only | 1.00 | 1.10 |
| 142 | Double loud speaker | 1.15 | 1.85 |
| 238 | Loud speaker, aerial & ground | 2.00 | 2.20 |
| 241 | Aerial, ground & elect'l | 2.00 | 2.20 |
| 242 | Loud speaker & elect'l | 2.00 | 2.20 |
| 239 | Aerial, ground & battery | 2.50 | 2.70 |
| 353 | Loud speaker, aerial, ground & elect'l | 3.00 | .. |

**With Plates
Bryant Numbers or Equal**

| Dry-type Numbers of Equivalents | | Price |
|---------------------------------|--|--------|
| 2957-2979 | One Flush Recep. One Tumb. Switch Tempus or Brass Plate. | \$1.75 |
| 2907-2989 | One Comp. Recep. One Tumb. Switch Tempus or Brass Plate. | 1.90 |
| 117 | * Porc. Flush Recep. One Ind. Switch- 060 Brass Plate... | 2.00 |
| 121 | * * * One Pilot light 060 Brass Plate... | 2.00 |
| 514 | * * * Disap. Door Rec. One Bulls Eye Solid Plate... | 5.00 |
| 518 | * * * * Flush Switch-Bulls Eye Solid Pl. | 7.50 |
| 467 | * * * Flush Recep. One Flush Switch Bulls Eye Solid Plate... | 6.00 |
| 763 | Duplex Flush Recep. Bulls Eye Solid Plate... | 3.75 |
| 558 | * * * Push Switch Bulls Eye Solid Plate... | 6.30 |
| 427 | Bulls Eye Receptacle & Lamp no plate. | 1.25 |
| | Hubbell Switch Tap Combination #7163 & 7164 without Plate. | 2.15 |

PULL TYPE OR LAMPHOLDERS

Keyless & Pull Chain for Lighting

| Univ. No. | G. E. No. | Type | Price |
|--------------|--------------|-----------------------------------|--------|
| 994 | 2288 | Insulated Chain and Cord | \$.65 |
| 995 | 2292 | 8" Chain | .55 |
| 996 | 2289 | Cord Only | .55 |
| 997 | 2293 | 8 Inches of Insulated Chain | .60 |
| 998 | 2287 | Short Chain and Cord | .60 |
| 999 | | 3 Feet of Chain | .80 |

P & S, Hubbell, Arrow, G. E., Bryant, Weber

Symbol: Column No. 1—Number of Alabax Fixture.
Column No. 2—Resale Price Standard White Glaze Finish.
Column No. 3—Resale Price All Over Color B-D-E-F-G-H-J-K-L-M.
Column No. 4—Resale Price Stripe Decoration No. 1A-2A-4A.

| Column No. 1 | Column No. 2 | Column No. 3 | Column No. 4 | Column No. 1 | Column No. 2 | Column No. 3 | Column No. 4 |
|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|
| Number | White | Color | Stripe | Number | White | Color | Stripe |
| AL 844 | \$3.30 | \$3.75 | ..... | AL 990 | \$1.90 | \$2.20 | \$2.40 |
| 845 | 3.60 | 4.05 | ..... | 1200 | 2.20 | 2.45 | 2.65 |
| 846 | 3.85 | 4.30 | \$4.75 | 1201 | 2.50 | 2.75 | 2.95 |
| 847 | 4.15 | 4.60 | 5.05 | 1202 | 2.20 | 2.45 | 2.65 |
| 848 | 1.85 | 2.15 | 2.30 | 1203 | 2.50 | 2.75 | 2.95 |
| 849 | 2.30 | 2.60 | 2.75 | 1273 | .45 | .60 | .70 |
| 850 | 2.30 | 2.60 | 2.75 | 1274 | .80 | .90 | 1.00 |
| 851 | 1.40 | 1.65 | 1.85 | 1275 | .85 | 1.00 | 1.10 |
| 852 | 3.40 | 3.75 | 4.20 | 1276 | .15 | .30 | .40 |
| 853 | 3.40 | 4.05 | 4.50 | 1300 | 2.80 | 3.10 | 3.25 |
| 859 | 1.85 | 2.15 | 2.30 | 1301 | 2.80 | 3.10 | 3.25 |
| 863 | 1.85 | 2.15 | 2.30 | 2349 | 2.60 | 2.90 | 3.10 |
| 864 | 2.75 | 3.20 | 3.65 | 1350 | 2.60 | 2.90 | 3.10 |
| 865 | 3.05 | 3.50 | 3.95 | 1351 | 1.70 | 1.95 | 2.15 |
| 866 | 2.75 | 3.20 | ..... | 1369 | 2.80 | 3.05 | 3.25 |
| 867 | 3.05 | 3.50 | ..... | 1370 | 2.80 | 3.05 | 3.25 |
| 869 | 2.50 | 2.75 | 2.95 | 1371 | 1.85 | 2.15 | 2.30 |
| 870 | 2.50 | 2.75 | 2.95 | 1449 | 2.70 | 2.95 | 3.15 |
| 871 | 1.55 | 1.80 | 2.00 | 1450 | 2.70 | 2.95 | 3.15 |
| 872 | 3.30 | 3.75 | 4.20 | 1451 | 1.75 | 2.05 | 2.25 |
| 873 | 3.60 | 4.05 | 4.50 | 1469 | 2.85 | 3.15 | 3.30 |
| 875 | 2.30 | 2.60 | 2.75 | 1470 | 2.85 | 3.15 | 3.30 |
| 898 | .95 | 1.20 | 1.40 | 1471 | 1.95 | 2.20 | 2.40 |
| 919 | 1.65 | 1.90 | 2.10 | 1475 | 2.85 | 3.15 | 3.30 |
| 920 | 1.65 | 1.90 | 2.10 | 1476 | 2.85 | 3.15 | 3.30 |
| 921 | .70 | 1.00 | 1.15 | 2007 | 1.25 | 1.50 | 1.70 |
| 922 | 1.65 | 1.90 | 2.10 | 2008 | 1.35 | 1.65 | 1.85 |
| 923 | 2.30 | 2.60 | 2.75 | 2009 | 1.30 | 1.60 | 1.75 |
| 924 | 2.00 | 2.25 | 2.45 | 2010 | 1.45 | 1.70 | 1.90 |
| 929 | 1.95 | 2.20 | 2.40 | 2011 | 1.10 | 1.35 | 1.55 |
| 930 | 1.95 | 2.20 | 2.40 | 2012 | 1.15 | 1.40 | 1.60 |
| 949 | 2.00 | 2.30 | 2.45 | 2013 | 1.70 | 1.95 | 2.15 |
| 950 | 2.00 | 2.30 | 2.45 | 2014 | 1.80 | 2.10 | 2.30 |
| 951 | 1.10 | 1.35 | 1.55 | 2015 | 1.55 | 1.80 | 2.00 |
| 952 | 1.95 | 2.20 | 2.40 | 2371 | 1.90 | 2.15 | 2.35 |
| 960 | 1.00 | 1.30 | 1.45 | 2469 | 3.25 | 3.65 | 4.10 |
| 962 | 2.00 | 2.30 | 2.45 | 2471 | 2.75 | 3.20 | 3.65 |
| 969 | 2.15 | 2.45 | 2.60 | 2669 | 4.40 | 4.85 | 5.30 |
| 970 | 2.15 | 2.45 | 2.60 | 2671 | 4.00 | 4.40 | 4.85 |
| 971 | 1.25 | 1.50 | 1.70 | 2846 | 3.85 | 4.30 | 4.75 |
| 980 | 1.50 | 1.75 | 1.95 | 2847 | 4.15 | 4.60 | 5.05 |
| 981 | 1.40 | 1.70 | 1.85 | 2852 | 3.30 | 3.75 | 4.20 |
| 982 | 1.70 | 1.95 | 2.15 | 2853 | 3.60 | 4.05 | 4.50 |
| 983 | 1.65 | 1.90 | 2.10 | 9826 | 1.95 | 2.25 | 2.45 |
| 984 | 1.25 | 1.55 | 1.70 | 9836 | 1.90 | 2.20 | 2.35 |
| 985 | 1.20 | 1.50 | 1.65 | 9896 | 2.15 | 2.40 | 2.60 |
| 989 | 1.85 | 2.15 | 2.30 | 9906 | 2.20 | 2.45 | 2.65 |

The above Prices do not include Glassware or Lamps.

SURFACE RECEPTACLES—STANDARD

Edison Base

| Description | | Edison Base | Universal Number | Price |
|--|--|-----------------------|------------------|-------|
| Pony Clear | Receptacle Side Screws. | All Keyless | | |
| | | No S. H. Groove.... | 50715 | \$.15 |
| | Round | | 9171 | .20 |
| Standard | Center | | 9402 | .30 |
| | Side | | 4013 | .40 |
| | | With | 58300 | .55 |
| Oblong | | | 4001 | .55 |
| Concealed | | | 50744 | .55 |
| | Round Base | With Removable Ring.. | 4026 | .65 |
| Oblong Receptacle | for Wood Molding with S. H. Groove.... | | 9445-6 | .20 |
| Miniature or Candelabra | Small Type..... | | 366-7 | .25 |
| | Extended | | 1422 | .85 |
| Mogul P & S. 520, Arrow 5012, GE 1194, Hubbell 3464, Weber | | | | |

T-SLOT SURFACE RECEPTACLES

| | | Price |
|------------------------------|-------------|--------|
| 10 A. Small T Slot Concealed | 2 Wire..... | \$.50 |
| 10 A. Small T Slot Cleat | 2 "..... | .50 |
| 10 A. Small For Wood Molding | 2 "..... | .50 |
| 10 A. Polarized Cleat | 2 "..... | .65 |
| 10 A. Polarized Concealed | 2 "..... | .65 |
| 10 A. Polarized Wood Molding | 2 "..... | .70 |
| 10 A. Fielding Receptacle | 2 "..... | .65 |
| 10 A. Polarized Concealed | 3 "..... | .85 |
| 20 A. Polarized Cleat | 2 "..... | .75 |
| 20 A. Polarized Concealed | 2 "..... | .75 |
| 20 A. Polarized Wood Molding | 2 "..... | .85 |
| 20 A. Polarized Concealed | 3 "..... | 2.00 |

BOX RECEPTACLES T Slot Type

| | Price |
|---|-------|
| 10 Amp. Receptacle..... | \$.50 |
| 10 Amp. " "..... | .50 |
| 10 Amp. " " with Covered Ter..... | .55 |
| 20 Amp. " " Polarized..... | .75 |
| 10 Amp. 3 $\frac{3}{4}$ Porcelain Single..... | .45 |
| 10 Amp. 3 $\frac{3}{4}$ " Duplex..... | .55 |
| 10 Amp. 4 " Single..... | .60 |
| 10 Amp. 4 " Duplex..... | .70 |

Edison Base Type

| | Price |
|--|--------|
| With Metal Cover for 3 $\frac{1}{4}$ " Box..... | \$.25 |
| " " " " 3 $\frac{1}{4}$ " " | .30 |
| " " " " 3 $\frac{1}{4}$ " " Weatherproof..... | .30 |
| " " " " 4" " | .35 |
| All Porcelain for 3 $\frac{1}{4}$ " Box..... | .40 |
| " " " " 4" " | .50 |
| Brass Covered Keyless for 3 $\frac{1}{4}$ " x 4" Box..... | 1.00 |
| Brass Covered Pull Chain for 3 $\frac{1}{4}$ " x 4" Box..... | 2.00 |

PL-20

Sockets, Heavy Duty

| HEAVY DUTY SOCKETS—Benjamin | | | | Price Each |
|---|--------|--------|----|------------|
| Benco Keyless Socket with Clamp Ring #4700 to 4703 Medium Base..... | | | | \$1.25 |
| " " " " without " " 4712 to 4715 " "..... | | | | 1.10 |
| " Pull " " with " " 4706 to 4709 " "..... | | | | 2.00 |
| Benco Keyless Socket Copper or Alum. #4200-1-4-5 & 4335 & 7..... | | | | .80 |
| " " " " Brass #4202-4203-4336..... | | | | .90 |
| " " " " 4207-8 4225-26 4236-37 Brass, Copper or Alum..... | | | | 1.55 |
| " Mogul " " Copper Clad #4210-4297..... | | | | 2.25 |
| Benco Threaded Holders Only..... | 2 1/4" | 3 1/4" | 4" | |
| Polish. Alum. Weathprf—#4215 & 4217..... | | | | \$3.30 |
| Copper " " —4370-72 & 73..... | | | | .35 |
| Brushed Brass " " —4377-79 & 80..... | | | | .35 |

| BENJAMIN MOGUL SOCKETS | | | | With | With |
|--------------------------------------|---------|--------|--------|------|-------|
| | Without | Yoke | Yoke | Iron | Alum. |
| One Piece Socket with Lamp Grip..... | \$1.00 | \$1.25 | \$1.50 | | |
| Two Piece Socket with Lamp Grip..... | 1.20 | 1.45 | 1.70 | | |

| BENJAMIN REFLECTOR SOCKETS | | | | With Type X or XR Fitting |
|--|--|--|--|---------------------------|
| Porcelain or Similar..... | | | | |
| Medium Base Keyless Tapped 3/4-1/4 No. 4605-4609 4650-51 & 65..... | | | | \$1.20 |
| " " " " Self-Locking 3/4-1/4 No. 4528-29-30-32-33..... | | | | 1.60 |
| " " " " Shock Absorb. 3/4-1/4 No. 4676-77-78-80-81..... | | | | 1.45 |
| " " " " Shock Absorb. Self Lock No. 4548-49-50-52-53..... | | | | 2.00 |
| " " " " Pull Chain No. 4534-35 & 4660-61-67..... | | | | 2.10 |
| Mogul Base Keyless Shock Absorbing No. 4670-71-72..... | | | | 2.00 |
| " " " " Not Shock Absorbing No. 4656-57 4666..... | | | | 1.65 |
| If X or XR Fitting not supplied on above sockets deduct..... | | | | .45 |

SWITCHES, FLUSH TUMBLER

| Plates & Boxes Extra | | | | Price |
|--|--|--|--|--------|
| Square Handle Porcelain Cup—Sgl. Pole..... | | | | \$.35 |
| " " " " Dble. "..... | | | | 1.00 |
| " " " " 3 Point..... | | | | .50 |
| " " " " Composition Cup—Sgl. Pole..... | | | | .85 |
| " " " " Dble. "..... | | | | 1.35 |
| " " " " 3 Point..... | | | | 1.00 |
| Round Handle Porcelain Cup—Sgl. Pole..... | | | | .35 |
| " " " " Dble. "..... | | | | 1.00 |
| " " " " 3 Point..... | | | | .50 |
| " " " " Composition Cup—Sgl. Pole..... | | | | 1.10 |
| " " " " Dble. "..... | | | | 1.50 |
| " " " " 3 Point..... | | | | 1.40 |
| New 2 Circuit Type Duple-Twin-Duplex, Multitoggle, etc. 2..... | | | | 1.15 |
| " " " " Triple-Triple-Triplex Multitoggle, 3..... | | | | 1.50 |
| Lock Type Porcelain Cup—Sgl. Pole..... | | | | 1.35 |
| " " " " Dble. "..... | | | | 1.85 |
| " " " " 3 Point..... | | | | 1.55 |
| EXTRAS—For Luminous Tip add for Each Handle..... | | | | .40 |
| For Glo Guide Handle Switches add for Each..... | | | | 1.00 |

TUMBLER SWITCH COMBINATIONS

| With Plates | | | | Price |
|---|--|--|--|--------|
| Bryant 2957-2979 One Tumb. Sw.—One Flush Recep. Brass or Temp. P..... | | | | \$2.00 |
| " " " " Pilot Light .060 Plate..... | | | | 3.00 |
| H & H 8887 " " Bulls Eye .060..... | | | | 3.25 |
| " " " " Recept. Bulls Eye Solid..... | | | | 5.45 |
| " " " " Duplex..... | | | | 5.75 |
| H & H 8974 One tumb. sw. and one Con. Outlet..... | | | | 2.00 |
| Hubbell 7163 & 7164 Switch Tap Combination No Plate..... | | | | 2.15 |

| PLATES For Tumbler Switches | | | | Price |
|---|--------|--------|--------|--------|
| | 1 Gang | 2 Gang | 3 Gang | 4 Gang |
| Stamped Brass Sprayed Finish .040 Thick..... | \$.15 | \$.30 | \$.45 | \$1.35 |
| " " " " Brush Brass .040..... | .20 | .40 | .60 | 1.55 |
| " " " " Sprayed .060..... | .20 | .40 | .60 | 1.70 |
| " " " " Brush Brass .060..... | .30 | .60 | .90 | 1.85 |
| Bakelite or Composition Molded..... | .20 | .40 | .60 | .80 |
| Twin & Triple Struck Up Plates..... | .30 | .50 | .50 | |
| Hubbell Bakelite Screwless Plates..... | .60 | 1.10 | 1.60 | |
| Bryant DeLuxe Wood Inlaid any Finish..... | 2.35 | 4.10 | 6.60 | |
| " " " " All Metal..... | .85 | 1.50 | 2.10 | |
| Guth Porcelain Enamel Plates..... | 1.30 | .65 | 1.00 | |
| Glass Mirror Plates..... | 1.00 | 1.75 | 2.50 | \$3.25 |
| Combination Switch & Receptacle Plate Molded..... | | | | .40 |
| " " " " Brass .040 thick..... | | | | .50 |

SWITCHES, FLUSH PUSH

| Plate & Boxes Extra | | | | Price |
|--|--|--|--|--------|
| Standard Shallow Type Porcelain Cup—Single Pole..... | | | | \$.35 |
| " " " " Dble. "..... | | | | 1.10 |
| " " " " 3 Point..... | | | | .50 |
| " " " " 4 Point..... | | | | .15 |
| Deep Type Porcelain Cup—Single Pole..... | | | | .70 |
| " " " " Dble. "..... | | | | 1.15 |
| " " " " 3 Point..... | | | | 1.15 |
| " " " " 4 Point..... | | | | .15 |
| Special High Grade—Single Pole..... | | | | 1.15 |
| " " " " Dble. "..... | | | | 1.50 |
| " " " " 3 Point..... | | | | 1.50 |
| " " " " 4 Point..... | | | | .15 |
| Lock Type Porcelain Cup—Single Pole..... | | | | 1.46 |
| " " " " Dble. "..... | | | | 1.85 |
| " " " " 3 Point..... | | | | 1.85 |
| " " " " 4 Point..... | | | | .35 |
| Electroliner Non-Indicating..... | | | | 1.75 |
| " " " " Indicating..... | | | | 1.90 |
| Extra for Luminous Button Add Per Switch..... | | | | .40 |

Switches, Pull Cord

PUSH SWITCH COMBINATIONS

| With Plates | | | | Price |
|---|--|--|--|--------|
| Bryant 117 D. P. Indic. Switch Flush Receptacle & .060 Plate..... | | | | \$2.00 |
| 413 One Push Switch—Bulls Eye and Solid Plate..... | | | | 4.00 |
| 518 " " Disap. Door Recp. Bulls Eye—Solid Plate..... | | | | 7.50 |
| 465 " " D. P. Flush Switch & Pilot Lamp .060 Plate..... | | | | 3.50 |
| 467 " " Flush Switch—Flush Recep.—Bulls Eye—Solid Plate..... | | | | 6.00 |
| 558 " " Duplex..... | | | | 6.80 |
| H & H 3752 " " Bulls Eye—Solid Plate..... | | | | 4.00 |
| 3759 " " Duplex Recep. Solid Plate..... | | | | 5.50 |
| 8810 " " Single..... | | | | 5.30 |

PLATES For Flush Push Switches

| Description | | | | 1 Gang | 2 Gang | 3 Gang | 4 Gang |
|--|--|--|--|--------|--------|--------|--------|
| Stamped Brass Sprayed Finish .040 Thick..... | | | | \$.15 | \$.30 | \$.45 | \$1.35 |
| " " " " Brush Brass .040..... | | | | .20 | .40 | .60 | 1.55 |
| " " " " Sprayed .060..... | | | | .20 | .40 | .60 | 1.70 |
| " " " " Brush Brass .060..... | | | | .30 | .60 | .90 | 1.85 |
| Bakelite or Composition..... | | | | .20 | .40 | .60 | .80 |
| Bryant DeLuxe Plates Wood Inlaid..... | | | | 2.25 | 3.90 | 6.40 | |
| " " " " All Metal..... | | | | .85 | 1.50 | 2.10 | |
| Guth Porcelain Plates..... | | | | .30 | .65 | 1.00 | |
| Glass Mirror Plates..... | | | | 1.00 | 1.75 | 2.50 | \$3.25 |
| Combination Push & Receptacle Plates .060 Brass..... | | | | | | | .50 |
| " " " " Molded..... | | | | | | | .65 |
| " " " " Guth Enameled..... | | | | | | | .65 |
| " " " " Mirror Glass..... | | | | | | | 1.75 |

SWITCHES, SURFACE SNAP

METAL COVERED SNAP SWITCHES

| Poles | Volts | Type | Size | 5 Amp. | 10 Amp. | 20 Amp. | 30 Amp. |
|--------------|-------|------------------------|----------|--------|---------|---------|---------|
| Single | 125 | Non-Indicating..... | Pony | \$.35 | | | |
| " | " | Indicating..... | " | .40 | | | |
| " | " | Non-Indicating..... | Standard | .55 | \$.75 | \$1.45 | \$2.10 |
| " | " | Indicating..... | " | .65 | .85 | 1.60 | 2.20 |
| Double | 250 | Non-Indicating..... | " | .90 | 1.10 | 2.20 | 2.55 |
| " | " | Indicating..... | " | 1.05 | 1.15 | 2.40 | 2.70 |
| Triple | " | Non-Indicating..... | " | | 2.80 | 3.60 | 4.35 |
| " | " | Indicating..... | " | | 3.00 | 3.75 | 4.50 |
| 3-Way | 125 | Non-Indicating..... | " | .90 | 1.25 | 2.25 | 2.70 |
| 4-Way | 250 | Non-Indicating..... | " | 1.30 | 2.85 | 6.00 | |
| Electroliner | " | Non-Indicat. 110V..... | " | 1.35 | 1.35 | 2.10 | |
| " | " | Indicating 110V..... | " | 1.50 | 1.50 | 2.25 | |

ALL PORCELAIN SNAP SWITCHES

| Poles | Volts | Type | Size | 5 Amp. | 10 Amp. | 20 Amp. | 30 Amp. |
|--------------|-------|---------------------|----------|--------|---------|---------|---------|
| Single | 125 | Non-Indicating..... | Pony | \$.50 | | | |
| " | 125 | Indicating..... | " | .55 | | | |
| " | 125 | Non-Indicating..... | Standard | .65 | \$.85 | \$1.60 | \$2.40 |
| " | 125 | Indicating..... | " | .70 | .95 | 1.75 | 2.55 |
| Double | 250 | Non-Indicating..... | " | .95 | 1.20 | 2.45 | 2.85 |
| " | 250 | Indicating..... | " | 1.10 | 1.35 | 2.60 | 3.00 |
| 3-Way | 125 | Non-Indicating..... | " | .95 | 1.35 | 2.60 | 3.00 |
| 4-Way | 125 | Non-Indicating..... | " | 1.50 | 3.00 | | |
| Electroliner | " | Non-Indicating..... | " | 1.55 | 1.55 | | |
| " | " | Indicating..... | " | 1.70 | 1.70 | | |

TUMBLER OR TOGGLE SNAP SWITCHES—Metal

| | 125-250 Volt | Double Pole | 3 Point | 4 Point |
|-----------------------------------|--------------|-------------|---------|---------|
| 5 Amp. Closed or Slott. Base..... | \$.35 | \$.85 | \$.80 | \$1.40 |
| 10 " " " " "..... | .80 | 1.10 | 1.25 | |

SNAP SWITCHES FOR WOOD MOLD, CONDULETS, ETC.

| | 5 Amp. 125 Volts | Indicating | Non-Indicating | Indicating | Non-Indicating |
|-------------------|------------------|------------|----------------|------------|----------------|
| Single Pole..... | \$.65 | \$.60 | \$.75 | \$.70 | |
| Double "..... | 1.10 | 1.05 | 1.20 | 1.15 | |
| Three Point..... | 1.10 | | 1.20 | | |
| Electroliner..... | 1.40 | 1.40 | | | |

PARTS FOR SNAP SWITCHES

| | |
|--|--------|
| Handles—Standard Type Each \$.12—Ratchet Type..... | \$1.18 |
| Bases—Porcelain 5 Amp. \$.12—10 Amp. \$.15—20 Amp..... | .30 |
| Covers—10 Amp & Under Metal \$.15—Porcelain..... | .20 |
| Over 10 Amp..... | .30 |

SWITCHES, PULL CORD, CHAIN, CANOPY, LEVOLIER, ETC.

PULL CORD SWITCHES

Complete With 1/2 Cap, Small Socket Type

| | Price |
|---|--------|
| Ceiling—Bottom Pull Complete..... | \$1.00 |
| Wall—Side Pull..... | 1.00 |
| Rosette—Side Pull..... | 1.00 |
| Fixture—Bottom Pull..... | 1.25 |
| Deduct for Base only without 1/2 Brass Cap..... | .10 |
| Add for 1/2 Brass Cap on any of above Switches..... | .20 |
| " " Small Concealed Base of above Switches..... | .25 |
| " " Cleat..... | .30 |
| " " Base to Fit 3 1/4 Box of above Switches..... | .55 |
| " " " " 4 " " " " "..... | 1.10 |
| " " Wood Moulding Base of above Switches..... | .30 |
| " " Angle Base..... | .30 |

HEAVY DUTY PULL CORD SWITCHES, METAL COVER With 8 Feet Heavy Cord

| | |
|---|--------|
| S.P. with Small Porc. Slotted or Solid B..... | \$1.65 |
| D.P. " " " " "..... | 1.85 |
| 3 Pole " " " " "..... | 1.85 |

These switches can be furnished with side or bottom open, at same price.

ELECTRICAL CONTRACTING

Switches, Pull Cord

Switches

TYPE "O" PULL SWITCHES
For Ceiling Fixtures or Ceiling Fans

Single or Double Pole—3 & 4 Point Electroliner & Motor Control—Similar to
Bryant #2473 to 2480 with 3/4 Caps, cord & Ball Each.....\$2.00

CANOPY SWITCHES

Snap or Tumbler Canopy Switches any style any make (except below).....\$.40
Pull Type P & S—3316 or 17—Arrow 340—Bryant 666......95

LEVOLIER PULL SWITCHES
McGill Co.

Price
Two-Lite Canopy or Fixture Switch #50-51-52.....\$1.00
Link Switch #59.....1.00
Conduit Box & Fixture Switch #61-62 & 63.....1.00
Switch Hickey 64 & 64 A for above......15

PENDANT SWITCHES
With Brass Pendant Cap

Price
Brass Shell Pend. Cap Side Button.....\$.60
" " " Bottom "......80
" Type "O" " ".....1.90
All Porcelain Side "......60
(10 Amps) "......85

FEED THROUGH SWITCHES

Price
Nickel Feed Thru Switch.....\$.50
Composition Feed Thru Switch......50
Bakelite Feed Thru Switch, One Heat......50
Bakelite Feed Thru Switch, Three Heat......90

DOOR SWITCHES

Price
Door Switch without Box.....\$3.50
Box Extra......50

DOOR SWITCHES & OPENERS
Edwards—commonly used types

Price
#9 Door Opener Mortise Type \$ 2.75 #152 Rim Type Flush.....\$ 6.10
48 " " " " 31.25 #152 for Surface Conduit.....25.25
48A " " " " 34.25 154 Mortise Type.....5.75
50 " " " " 31.25 153 Plate Type.....7.15
50A " " " " 34.25 174 Door Switch.....8.65
51 " " " " 34.25 Box for above #2000.....1.30
51A " " " " 35.25 1541 Opener Mortise Type.....10.50
52 " " " " 38.25
#239—Latch for #52 " " 3.55

Partrick & Wilkins commonly used types

Mortise Type.....\$2.75 Rim Type.....\$5.00

SWITCHES, KNIFE, ENTRANCE & PANEL

ENTRANCE & PANEL SWITCHES
30 Amp. 125 Volts, Plug Fused

Description Location of Fuses Price
Double Pole.....Top \$.80
" " " Bottom......80
" " " Large Size.....Top .85
" " " " Bottom......85
Triple.....Top 1.20
" " " Bottom.....1.20
Double Pole Single Branch.....Top 1.30
" " " " Bottom.....1.30
" " " " Large Type.....Top 1.45
" " " " Bottom.....1.45
Double Pole—Double Branch Vert. Mains.....2.90
" " " Horiz. Mains.....2.90
Trip. to D. P. Double Branch Vert. Mains.....3.05
" " " Horiz. Mains.....3.05

BABY KNIFE SWITCHES
Any Make

Any Make Porcelain Base Slate Base
125 Volt 250 Volts
15 Amp. 30 Amp. 15 Amp. 30 Amp.
Single Pole Single Throw.....\$.50 \$.60 \$.60 \$.70
" " Double......85 1.05 1.00 1.25
Double " Single......60 .70 .70 .85
" " Double.....1.05 1.30 1.25 1.50
Triple " Single.....1.30 1.55 1.50 1.85
" " Double.....2.00 2.50

TYPE "C" KNIFE SWITCHES
Slate Base Front Connected
Trumbull-Bulldog or Similar

Front Connected Slate Base Not Fusible Fusible
2 3 4 2 3 4
Pole Pole Pole Pole Pole Pole
Sgl. Throw 30 A. 250 V. Only.....\$1.15 \$1.65 \$2.25
" " 250 & 500 V. AC.....1.75 2.65 \$1.70 \$2.60 \$3.50
" " 30 A.2.00 3.00 4.05 2.95 4.45 5.95
" " 60 A.4.10 6.20 8.25 6.00 9.05 12.05
" " 100 A.7.45 11.15 14.85 11.10 16.70 22.25
Dbl. Throw 30 A. 250 V. Only.....1.90 2.95 4.22
" " 250 & 500 V. AC.....2.80 4.35 3.60 5.80 7.95
" " 30 A.3.30 5.10 7.25 5.60 8.95 12.35
" " 60 A.7.40 11.35 16.10 12.20 19.50 26.85
" " 100 A.12.35 19.05 25.55 21.40 34.30 43.90

SWITCHES, RESIDENCE, METER
SERVICE, INDUSTRIAL, ETC.

SMALL SERVICE ENTRANCE SWITCHES
30 Amp. "Square D" Switches Residence Type

| Numbers | Volts | Description | 2 Pole | 3 Pole |
|-------------|-------|---------------------------|--------|--------|
| 97211-97311 | 125 | For Plug Fuse Solid Neut. | \$1.65 | \$2.50 |
| 99211-99311 | 125 | " " " Neut. Fused | 1.65 | 3.00 |
| 78211-78311 | 125 | " " " Meter Test | 2.55 | 4.10 |
| 1211 | 125 | Porc. Entr. Switch | 1.80 | 3.20 |
| 97251-97351 | 250 | Encl. Fused Solid Neut. | 1.65 | 3.20 |
| 99251-99351 | 250 | " " " Fused Neut. | 2.50 | 4.35 |

METER SERVICE SWITCHES

"Square D" Accessible Main Fuses Without End Walls

| Amps. | Poles | Fused For | Neutral | Meter Test Type Number | Price | Non-Meter Test Type Number | Price |
|-------|-------|-----------|---------|------------------------|---------|----------------------------|---------|
| 30 | 2 | 2 Plug | Fused | 30211 | \$ 4.00 | 10211 | \$ 3.65 |
| 30 | 2 | 1 " | Solid | 30231 | 3.65 | 10231 | 3.35 |
| 30 | 3 | 2 " | " | 30331 | 4.50 | 10331 | 3.95 |
| 30 | 3 | 2 " | Unfused | 30381 | 4.85 | 10381 | 4.85 |
| 30 | 2 | 2 Enc. | Fused | 30251 | 4.85 | 10251 | 4.55 |
| 30 | 2 | 1 " | Solid | 30271 | 4.20 | 10271 | 3.85 |
| 30 | 3 | 2 " | Unfused | 30361 | 5.40 | 10361 | 5.65 |
| 30 | 3 | 2 " | Solid | 30371 | 4.85 | 10371 | 4.55 |
| 60 | 2 | 2 " | Fused | 30252 | 16.80 | 10252 | 15.95 |
| 60 | 2 | 1 " | Solid | 30272 | 15.95 | 10272 | 15.05 |
| 60 | 3 | 2 " | Unfused | 30362 | 21.65 | 10362 | 20.55 |
| 60 | 3 | 2 " | Solid | 30372 | 17.70 | 10372 | 16.80 |
| 100 | 2 | 2 " | Fused | 30253 | 25.60 | 10253 | 24.75 |
| 100 | 2 | 1 " | Solid | 30273 | 25.60 | 10273 | 23.85 |
| 100 | 3 | 2 " | Unfused | 30383 | 30.90 | 10383 | 29.35 |
| 100 | 3 | 2 " | Solid | 30373 | 27.40 | 10373 | 25.60 |

METER SERVICE SWITCHES

"Square D" Main Fuses Sealed Without End Walls

| Amps. | Poles | Fused For | Neutral | Meter Test Type Number | Price | Non-Meter Test Type Number | Price |
|-------|-------|-----------|---------|------------------------|---------|----------------------------|---------|
| 30 | 2 | 2 Plug | Fused | 36211 | \$ 3.25 | 16211 | \$ 2.85 |
| 30 | 2 | 1 " | Solid | 36231 | 3.25 | 16231 | 2.85 |
| 30 | 3 | 2 " | " | 36331 | 3.45 | 16331 | 3.00 |
| 30 | 3 | 2 " | Unfused | 36381 | 3.45 | 16381 | 3.45 |
| 30 | 2 | 2 Enc. | Fused | 36251 | 3.80 | 16251 | 3.40 |
| 30 | 2 | 1 " | Solid | 36271 | 3.50 | 16271 | 3.15 |
| 30 | 3 | 2 " | Unfused | 36361 | 4.00 | 16361 | 4.30 |
| 30 | 3 | 2 " | Solid | 36371 | 4.00 | 16371 | 3.55 |
| 60 | 2 | 2 " | Fused | 36252 | 15.05 | 16252 | 14.20 |
| 60 | 2 | 1 " | Solid | 36272 | 14.15 | 16272 | 13.30 |
| 60 | 3 | 2 " | Unfused | 36362 | 19.00 | 16362 | 17.90 |
| 60 | 3 | 2 " | Solid | 36372 | 15.95 | 16372 | 15.05 |
| 100 | 2 | 2 " | Fused | 36253 | 23.85 | 16253 | 23.00 |
| 100 | 2 | 1 " | Solid | 36273 | 23.85 | 16273 | 22.10 |
| 100 | 3 | 2 " | Unfused | 36383 | 26.50 | 16383 | 24.75 |
| 100 | 3 | 2 " | Solid | 36373 | 25.60 | 16373 | 23.85 |

MISCELLANEOUS

Price
Enclosed Double Branch Cutout No. 35211—30 Amp. 125 Volts.....\$2.35
Fused Plug Receptacle.....5021—30 " 125 " 2.20
" " " " 5001—30 " 250 " 5.65
Cabinet Porcelain Fuse Block... 1021—30 " 125 " 1.25

UNIVERSAL METER SERVICE SWITCHES

"Square D" Meter Service Types

| Single Type | Price | Ganging Type | Price |
|-------------------------------|-------|----------------------------|-------|
| No. 32211 or 33211.....\$3.45 | | No. 12211-13211.....\$3.85 | |
| No. 32311.....3.75 | | No. 12311.....4.15 | |
| No. 34211.....4.30 | | No. 14311.....5.25 | |
| No. 34311.....4.85 | | | |

METER SERVICE SWITCHES

"Square D" Without End Walls Live & Dead Fuse Type

METER TESTING

| Number | Amps. | Pole | Fused | Neutral | Description | Price |
|--------|-------|------|---------|---------|--------------------------------|---------|
| 55211 | 30 | 2 | 1 Plug | Solid | Single Type Fuse Dead..... | \$ 2.20 |
| 58211 | 30 | 2 | 2 " | Fused | " " " Live..... | 2.70 |
| SK-016 | 30 | 2 | 1 " | Solid | " " " Dead..... | 2.70 |
| 55311 | 30 | 3 | 2 " | Solid | " " " Live..... | 3.45 |
| 57311 | 30 | 3 | 2 " | " | " " " Live..... | 3.45 |
| 15211 | 30 | 2 | 1 " | " | Gang Type Fuse Dead..... | 2.60 |
| 18211 | 30 | 2 | 2 " | Fused | " " " Live..... | 3.10 |
| 39231 | 30 | 2 | 1 " | Solid | Gang Type Acces. M. Fuses..... | 4.05 |
| 39331 | 30 | 3 | 2 " | " | Gang Type Acces. M. Fuses..... | 4.85 |
| 15311 | 30 | 3 | 2 " | Solid | " " " Live..... | 3.85 |
| 17311 | 30 | 3 | 2 " | " | " " " Live..... | 3.85 |
| 58251 | 30 | 2 | 2 Cart. | Fused | Extra for End Wall..... | .30 |
| 26251 | 30 | 2 | 2 " | " | Cartridge Fuse Live..... | 3.05 |
| 57351 | 30 | 3 | 2 " | Solid | " " " Dead..... | 3.75 |
| 28252 | 60 | 2 | 2 " | Fused | " " " Live..... | 8.45 |
| 27312 | 60 | 3 | 2 " | Solid | " " " Live..... | 8.90 |
| 14312 | 60 | 3 | 2 " | " | " " " Dead..... | 19.80 |
| 28253 | 100 | 2 | 2 " | Fused | " " " Live..... | 15.05 |
| 27313 | 100 | 3 | 2 " | Solid | " " " Live..... | 15.90 |
| 14313 | 100 | 3 | 2 " | " | " " " Dead..... | 27.35 |



New ARROW TIME-SAVERS *in SURFACE TUMBLER SWITCHES*

PONY TYPE

Flashing into quick popularity for fast, competitive work. Saving minutes on small jobs, hours on big jobs, money on all jobs. Cutting lost motion, as with the Snap-on Cover. Doing a double job with a single device, as with Switch and Outlet Box Cover in one. Turning time into money with the speed you need.

No. 6060: *Surface Tumbler with Snap-on Cover. Cover goes on with a push. Speeds-up wiring; saves fussing with small screws.*

No. 6064: *Surface Tumbler with Outlet Box Cover. Does double job with a single device; handiest hook-up for pipe jobs. Switch cover nicked; box cover japanned.*

No. 6070: *Surface Tumbler with Bakelite Cover. Non-corroding in dampness, salt air or chemical fumes. For laundries, mills, out-buildings, seashore dwellings, etc.*

No. 6074: *Switch and Outlet Box Cover combined. Switch cover of Bakelite; box cover japanned. For jobs exposed to dampness, salt air or chemical fumes.*

Here's the keynote of Arrow designing: finding, developing new aids to wiring. Lighting the way to work faster, handier. Adding every little convenience; striking out the obstacles to economy and profit. Making the Arrow Catalogue the Contractor's best friend. May we send you data-sheet on the new numbers?

ARROW ELECTRIC DIVISION

THE ARROW-HART & HEGEMAN ELECTRIC CO.

HARTFORD, CONN.

We Endorse and Agree to Support

with immediate action the **SAFETY RULES** and Recommendations as published by the **Bureau of Standards**, U. S. Department of Commerce in Handbook No. 7.

The Bull Dog Electric Products Company recognizes the inconsistency of recommending Safety Enclosed Switches and at the same time offering for sale dangerous Live Face Panelboards and Switchboards.

As a leading Manufacturer of Electrical Distributing and Controlling Apparatus we shall at once discontinue advertising or offering for sale such equipment or products not recognized or approved by this Safety Code.

Effective immediately we will no longer make the following:

- 1 — Live Face or Open Type Lighting Panelboards.
- 2 — Lighting Panelboards having Main Fuses (not switched) or fusible only sub-feeds on the Panels.
- 3 — Feeder or Distributing Panelboards having fuses only in the branches (not switched).

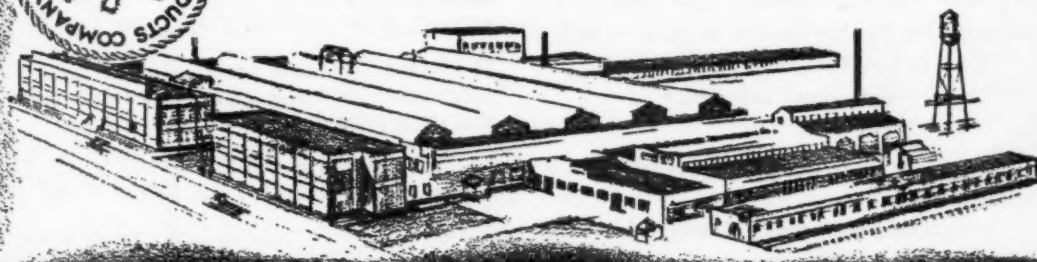
We believe that it is possible with modern manufacturing methods and conditions to produce apparatus to comply with this Safety Code at a minimum cost.

Our Salesmen will no longer quote prices or offer for sale any of the apparatus which we have heretofore manufactured that conflicts with these Safety Rules.



BULL DOG ELECTRIC PRODUCTS CO.
DETROIT, U. S. A.

OVER 25 YEARS OF RESEARCH AND DEVELOPMENT



THE NATIONAL ELECTRICAL SAFETY CODE OF THE U. S. BUREAU OF STANDARDS

for the prevention of injury and loss of life from electrical hazards has been approved by the *American Engineering Standards Committee comprising the following member bodies:

American Electric Railway Association
American Institute of Architects
American Institute of Electrical Engineers
American Institute of Mining, and Metallurgical Engineers
American Mining Congress
American Railway Association
American Society of Civil Engineers
American Society of Mechanical Engineers
American Society for Testing Materials
Association of American Steel Manufacturers
National Electrical Manufacturers Assoc.
Society of Automotive Engineers

Electric Light and Power Group, comprising the Association of Edison Illuminating Companies and the National Electrical Light Association

Fire Protection Group, comprising the Associated Factory Mutual Fire Insurance Companies, the National Board of Fire Underwriters, the National Fire Protection Association and the Underwriters' Laboratories

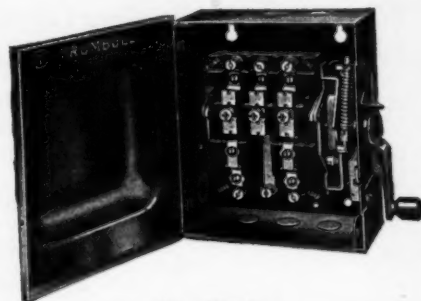
Gas Group, comprising the American Gas Association, the Compressed Gas Manufacturers' Association and the International Acetylene Association

Safety Group, comprising the National Bureau of Casualty and Surety Underwriters and the National Safety Council
Telephone Group, comprising the Bell Telephone System and the United States Independent Telephone Association

United States Department of Agriculture
United States Department of Commerce
United States Department of the Interior
United States Department of Labor
The Panama Canal
United States Navy Department
United States War Department

*American Standards Association

Another New Trumbull Motor Starter Type "T.M." (Thermostatic Manual)



No. 91360

Box 6 3/4" W. x 8" L. x 4 1/8" D.

H. P. Ratings

| | 115 V. A. C. | 230 V. A. C. | 460 V. A. C. | 575 V. A. C. |
|--------------------|-----------------|-----------------|-----------------|-----------------|
| Single Phase | 1 1/2 | 3 | 5 | 5 |
| Polyphase | 3 | 5 | 7 1/2 | 7 1/2 |

Application

The "T.M." Switch is intended for use in starting motors at all voltages up to 575 A.C. within the maximum H.P. ratings shown above.

It has all the advantages of the "Two-Position" ("Throw-over") and Thermal Cutout types with the additional feature of having no fusible element which is destroyed when overloaded.
(See features opposite.)

No. 9806
Heater Unit

Heater Units

Interchangeable Heater Units are listed in convenient steps from 1-20 Amps. capacity.

Features

OVERLOAD in any phase
THROWS HANDLE "OFF" and
TRIPS THE ENTIRE SWITCH with
QUICK BREAK ACTION even though handle is held
"ON" and then
THERE IS NOTHING TO RENEW—simply
THROW HANDLE "ON" to RESTART MOTOR
or to RESET THERMOSTAT

This Switch
WILL BREAK STALLED ROTOR CURRENT at
listed ratings owing to
"CIRCLE T" DOUBLE BREAK CONTACTS

HANDLE operated with
SIMPLE "ON" and "OFF" MOVEMENT and
INDICATES position of Switch

INTERCHANGEABLE HEATER UNITS may be
REMOVED FROM THE FRONT for Motors of dif-
ferent ratings

ENTIRE SWITCH and HANDLE
MAY BE REMOVED by loosening two screws

Listed on Page 20 of Cat. 14—Have you received your copy?

Sold Through Jobbers

THE TRUMBULL ELECTRIC MFG. COMPANY

Plainville, Conn.

NEW YORK
114 Liberty St.

BOSTON
1002 Statler Bldg.

BRANCH PANEL BOARD AND SWITCH BOARD FACTORY AT
LUDLOW, KENTUCKY.

PHILADELPHIA.

ROOM 206
S. E. CORNER BROAD AND SPRING GARDEN STS.

ATLANTA

CHICAGO
2001 W. Pershing Rd.

SAN FRANCISCO
595 Mission St.



STEELTUBES [E. M. T.]★ has the same inside diameter as heavy conduit. Made in three sizes ($\frac{1}{2}$ " , $\frac{3}{4}$ " and 1") with diameters and wall-thickness shown above. One coupling furnished with each ten-foot length.

10

STEELTUBES Advantages

- 1—Saves thread-cutting
- 2—Bends easily
- 3—Light—handles easily
- 4—Takes any fitting
- 5—Speeds up the job
- 6—Resists corrosion
- 7—Costs less
- 8—Standard price
- 9—Carries Underwriters' Label
- 10—Local stocks always available.

The Little Split Sleeve Saves Threading—

THE split sleeve shown above is what puts an end to thread cutting on the wiring job that's done with STEELTUBES [E. M. T.]★

This sleeve fits loosely over the tubing. The threaded portion is slightly tapered and screws into a threaded collar. Screwed up with wrench or pliers, this collar holds the tube-end in a grip that resists the loosening effect of expansion and contraction . . . of vibration . . . of concussion.

The STEELTUBES threaded sleeve and collar serves as a coupling or a connector. Used as an adapter it takes any standard fitting, Condulet, or any outlet box or panel.

Ask for a STEELTUBES Sample Package. It's free. It contains samples of each size of STEELTUBES . . . and a STEELTUBES Connector.

Electrical Division
STEEL AND TUBES, INC.
Cleveland, Ohio

(A subsidiary of Republic Iron & Steel Co.)

★STEELTUBES Electrical Metallic Tubing is threadless, strong, light and easy to handle. Costs less to buy, saves time and money on the job.

Steeltubes

PL-22

Switches

METER SERVICE SWITCHES—Continued

| NON-METER TEST TYPE | | | | | |
|---------------------|-------|------|---------|----------|---------------------------|
| Number | Amps. | Pole | Fused | Neutral | Description |
| 26311 | 30 | 3 | 2 Plug | Solid | Plug Type Fuse Dead..... |
| 26351 | 30 | 3 | 2 Cart. | " | Cart. Type Fuse Dead..... |
| SK-615 | 30 | 3 | 2 Plug | Switched | Plug Type Fuse Dead..... |
| SK-659 | 30 | 3 | 2 Cart. | " | Cart. Type Fuse Dead..... |
| SK-660 | 60 | 3 | 2 " | " | Cart. Type Fuse Dead..... |
| SK-674 | 100 | 3 | 2 " | " | Cart. Type Fuse Dead..... |

POLYPHASE METER SERVICE SWITCHES

"Square D" Accessible Main Fuse Type

| METER TEST TYPE | | | | |
|-----------------|-------|------|-------------|---------|
| Number | Amps. | Pole | Fused | Price |
| 30391 | 30 | 3 | 3 Cart..... | \$ 9.90 |
| 30392 | 60 | 3 | 3 " | 20.35 |
| 30393 | 100 | 3 | 3 " | 30.00 |

| NON METER TEST | | | | |
|----------------|-------|------|-------------|---------|
| Number | Amps. | Pole | Fused | Price |
| 10391 | 30 | 3 | 3 Cart..... | \$ 9.30 |
| 10392 | 60 | 3 | 3 " | 18.60 |
| 10393 | 100 | 3 | 3 " | 28.25 |

"Square D" Sealable Main Fuses

| METER TEST TYPE | | | | |
|-----------------|-------|------|-------------|---------|
| Number | Amps. | Pole | Fused | Price |
| 36351 | 30 | 3 | 3 Cart..... | \$ 9.20 |
| 36352 | 60 | 3 | 3 " | 17.80 |
| 36393 | 100 | 3 | 3 " | 26.50 |

| NON METER TEST | | | | |
|----------------|-------|------|-------------|---------|
| Number | Amps. | Pole | Fused | Price |
| SK-671 | 30 | 3 | 3 Cart..... | \$ 4.30 |
| SK-672 | 60 | 3 | 3 " | 11.70 |
| SK-673 | 100 | 3 | 3 " | 19.20 |

FITTINGS FOR STANDARDIZED SWITCHES

| | Price |
|--|--------|
| End Walls for 30 Amp. Switches..... | \$.30 |
| 60 & 100 Amp. Switches..... | 10 |
| Trough Closing Plates No. 20533 & 34..... | 10 |
| Connecting Trough No. 20733—3 1/2" Long..... | 45 |
| 20738—3 1/2" "..... | 80 |
| Universal End Wall & Shutters..... | 30 |
| Meter Shutter only No. 24358..... | 15 |

TYPE C

"Square D" Single Throw, Industrial Switches Quick Break Only

| 250 Volts Fusible | | | |
|-------------------|--------------|----------------|----------------|
| Amps. | 2 Pole | 3 Pole | Price |
| 30 #85251 | \$ 3.20 | #85351 \$5.20 | 30 |
| 60 #46252 | \$ 8.20 | #46352 \$10.00 | 60 |
| 60 Solid Neutral | #47312 9.10 | 60 | 500 Volt Fused |
| 100 #45253 | 12.75 | #45353 15.50 | 100 |
| 100 Solid Neutral | #48313 14.60 | 100 | 500 Volt Fused |
| 200 #46254 | 20.00 | #46354 26.40 | 200 |
| 200 Solid Neutral | #47314 22.75 | 200 | 500 Volt Fused |

TYPE A

"Square D", Industrial Quick Make & Break, Single Throw

| 250 Volts Fusible | | | |
|-------------------|---------|----------------|--------|
| Amps. | 2 Pole | 3 Pole | Price |
| x30 #80251 | \$10.90 | #80351 \$12.75 | x30-60 |
| 60 #86252 | 13.65 | #86352 17.30 | 30-60 |
| 100 #86253 | 20.90 | #86353 22.30 | 100 |
| 200 #86254 | 32.75 | #86354 36.40 | 200 |

30 AMP. TYPE C

"Square D", Industrial, Single Throw

| 250 Volts | | | |
|-----------|--------|--------------------|-----------|
| No. | 2 Pole | Description | 3 Pole |
| 83251 | \$3.20 | Quick Make & Break | No. 83351 |
| 91251 | 2.65 | Not Quick Break | 91351 |
| x90251 | 7.75 | Quick Break Only | x90351 |

MOTOR STARTERS

"Square D", Quick Make & Break, Single Throw

| Numbers & Types | Amps. | Volts | 2 Pole | 3 Pole | 4 Pole |
|---|-------|------------|---------|---------|---------|
| 76251-351-451 Cover Control..... | 30 | 250 V. | \$15.50 | \$16.40 | \$22.75 |
| 76352-76452 | 60 | 250 V. | 22.75 | 31.75 | |
| 76341-76441 | 30 | 500-600 V. | 22.75 | 31.75 | |
| 76342 | 60 | 500-600 V. | 32.75 | | |
| 69251-351-451 without Cover Cont. | 30 | 250 V. | 13.65 | 14.60 | 20.95 |
| 69352-69452 | 60 | 250 V. | 20.95 | 30.00 | |
| 69341-69441 | 30 | 500-600 V. | 20.95 | 30.00 | |
| 69342 | 60 | 500-600 V. | 31.00 | | |
| 75251-351 Time Protective..... | 30 | 250 V. | 6.40 | 6.85 | |
| 75341 & SK2054 Time Protective.... | 30 | 500-600 V. | 11.80 | 13.65 | |
| No. 98251 For Small AC & DC Motors up to 1/4 H. P. 220 Volts AC.. | | | | | \$1.85 |

Switches

TYPE "C" SWITCHES

Cutler-Hammer (T-V) Single Throw Industrial Type

| 250 Volts DC or AC Fusible | | | |
|----------------------------|---------|---------------|-------|
| Amps | 2 Pole | 3 Pole | Price |
| 30 A #4321 | \$ 2.90 | #4331 \$ 4.35 | 30 A |
| 30 A 4322 | 3.15 | 4332 5.15 | 60 A |
| 60 A 4622 | 8.10 | 4632 9.90 | 60 A |
| 100 A 4122 | 12.60 | 4132 15.30 | 100 A |
| 200 A 4222 | 19.80 | 4232 26.10 | 200 A |
| 400 A 4422 | 44.80 | 4432 61.50 | 400 A |

| 125-250 Volts—Solid Neutral | | | |
|-----------------------------|---------|----------------|-------|
| Amps | 3 Pole | 4 Pole | Price |
| 30 A #04332 | \$ 6.70 | #04342 \$ 8.10 | 30 A |
| 60 A 04632 | 9.00 | 04642 11.25 | 60 A |
| 100 A 04132 | 14.40 | 04142 20.25 | 100 A |
| 200 A 04232 | 22.50 | 04242 31.50 | 200 A |
| 400 A 04432 | 58.00 | 04442 74.50 | 400 A |

ENTRANCE SWITCHES

Cutler-Hammer (T-V)

| Numbers | Amps. | Volts | Description | 2 Pole | 3 Pole |
|---------------|-------|-------|----------------------------------|---------|---------|
| 77 Light Duty | 30 | 125 | One Plug Fuse One Blade..... | \$ 1.65 | ..... |
| 73021 | 30 | 125 | | 1.65 | ..... |
| 7321-7331 | 30 | 125 | Two & Three Blades & Fuses.. | 1.65 | \$ 2.90 |
| 07331 | 30 | 125 | 2 Fuses—2 Blades..... | ..... | 2.25 |
| 07322 | 30 | 250 | 1 Cartridge Fuse—1 Blade..... | 1.85 | ..... |
| 7322-7332 | 30 | 250 | 2&3 Cartridge Fuses 2 & 3 Blades | 2.50 | 4.30 |
| 07332 | 30 | 250 | 2 | ..... | 3.25 |
| 7422-7432 | 30 | 250 | Unfused 2 & 3..... | 2.35 | 4.05 |
| 7622-7632 | 60 | 250 | 2 & 3 Fuses—2 & 3 Blades.... | 6.15 | 7.15 |
| 07632 | 60 | 250 | 2 Blades 2 Fuses..... | ..... | 6.85 |
| 7122-7132 | 100 | 250 | 2 & 3 Fuses—2 & 3 Blades.... | 9.40 | 11.55 |
| 07132 | 100 | 250 | 2 Blades 2 Fuses..... | ..... | 10.90 |

METER SERVICE SWITCHES

Cutler-Hammer (T-V) Live Fuse Type, Without End Walls

| Numbers | Amps. | Volts | Description | 2 Pole | 3 Pole |
|-------------|-------|-------|---------------------------|---------|---------|
| 50321-52331 | 30 | 125 | For 1 & 2 Plug Fuses..... | \$ 2.75 | \$ 3.45 |
| 50322-52332 | 30 | 125 | " 2 Cartridge Fuses..... | 3.15 | 3.75 |
| 50622-52632 | 60 | 250 | " 2 "..... | 8.50 | 8.90 |
| 50122-52132 | 100 | 250 | " 2 "..... | 15.10 | 16.00 |

"SAFE-LOCK" ACCESSIBLE METER SERVICE Cutler-Hammer (T-V) Test Type Without End Walls

| Numbers | Amps. | Volts | Description | 2 Pole | 3 Pole |
|--------------|-------|-------|------------------------------|---------|---------|
| 55321-55331 | 30 | 125 | For 2 Plug Fuses..... | \$ 3.95 | \$ 4.55 |
| 55322-550332 | 30 | 250 | " 2 & 3 Cartridge Fuses..... | 4.85 | 4.85 |
| 55622-550632 | 60 | 250 | " "..... | 16.80 | 17.70 |
| 55122-550132 | 100 | 250 | " "..... | 25.60 | 27.40 |

POLYPHASE METER SERVICE SWITCHES

| All 3 Pole | (Without Ends) | 30 A | 60 A | 100 A |
|---|----------------|---------|---------|-------|
| 931-223-236-231 Sealed Fuse Meter Test Type | \$10.00 | \$16.65 | \$26.15 | |
| 55332-632-132 Accessible Fuse Meter Test Type | 10.90 | 20.35 | 30.00 | |
| 58332-632-132 Accessible Fuse Non-Test Type | 10.25 | 18.60 | 28.25 | |

UNIVERSAL METER SERVICE SWITCHES

Cutler-Hammer (T-V)

| | Price |
|------------------------------------|--------|
| #971-123 Without End Wall..... | \$3.45 |
| 973-333 " "..... | 3.75 |
| 972-123 " "..... | 4.30 |
| 975-333 & 979-333 No End Wall..... | 4.85 |

TROUGHS

Cutler-Hammer (T-V)

| 2-3 & 4" | 5" | 7" | 9" | 10" |
|----------|-----|-----|-----|-----|
| 45c | 50c | 62c | 80c | 88c |

SHUTTERS END WALLS

Cutler-Hammer (T-V)

| | 30 Amp. | 60 & 100 Amp. |
|--|---------|---------------|
| Single Piece End Wall used with Cabinet..... | \$.30 | \$.80 |
| Shutters for Shutter Type End Wall..... | .15 | .27 |
| Conduit End Wall..... | .30 | .80 |
| Universal End Wall..... | .40 | ..... |

CURRENT BREAKERS

250 Volts DC & AC. Fused Bottom

| Amps. | No. | 2 Pole | Price | No. | 3 Pole | Price | No. | 4 Pole | Price |
|--------|--------|--------|---------|--------|--------|---------|--------|--------|---------|
| 30A. | CB3322 | | \$10.80 | CB3332 | | \$12.60 | CB3342 | | \$16.20 |
| 60 A. | CB3622 | | 13.50 | CB3632 | | 17.10 | CB3642 | | 21.60 |
| 100 A. | CB3122 | | 20.70 | CB3132 | | 27.00 | CB3142 | | 36.00 |
| 200 A. | CB3222 | | 39.60 | CB3232 | | 49.50 | CB3242 | | 59.40 |

600 Volts DC & AC

| Amps. | No. | 2 Pole | Price | No. | 3 Pole | Price | No. | 4 Pole | Price |
|--------|--------|--------|---------|--------|--------|---------|--------|--------|---------|
| 30 A. | CB3326 | | \$14.40 | CB3336 | | \$18.00 | CB3346 | | \$21.60 |
| 60 A. | CB3626 | | 16.20 | CB3636 | | 18.90 | CB3646 | | 23.40 |
| 100 A. | CB3126 | | 25.20 | CB3136 | | 28.80 | CB3146 | | 37.50 |
| 200 A. | CB3226 | | 41.85 | CB3236 | | 57.60 | CB3246 | | 73.35 |

250 Volts DC or 500-600 Volts AC

| Amps. | No. | 2 Pole | Price | No. | 3 Pole | Price | No. | 4 Pole | Price |
|--------|--------|--------|---------|--------|--------|---------|--------|--------|---------|
| 30 A. | CB4326 | | \$11.70 | CB4336 | | \$14.40 | CB4346 | | \$19.80 |
| 60 A. | CB4626 | | 11.70 | CB4636 | | 14.40 | CB4646 | | 19.80 |
| 100 A. | CB4126 | | 19.80 | CB4136 | | 21.60 | CB4146 | | 28.80 |
| 200 A. | CB4226 | | 27.45 | CB4236 | | 33.75 | CB4246 | | 39.60 |

MOTOR STARTING SWITCHES

| | | T-V | | | |
|--------|-------------------------------|----------|-------|---------|----------------|
| Series | Description | Amps | Volts | 2 Pole | 3 Pole 4 Pole |
| #771 | Bantam Star with Ther. Cut... | 1/2 H.P. | 110 | \$ 3.25 | |
| 43000 | With Plug Thermal Cutouts | 30 | 220 | 8.10 | \$9.90 \$12.80 |
| 43000 | " " " " " " | 30 | 440 | 14.85 | 17.05 |
| 46000 | Motor Starter — No Fuses | 30 | 220 | 12.50 | 13.05 16.50 |
| 46000 | " " " " " " | 30 | 440 | 19.50 | 23.40 |
| 46000 | " " " " " " | 30 | 550 | 26.60 | |
| 46000 | " " " " " " | 60 | 220 | 17.10 | 19.50 26.60 |
| 46000 | " " " " " " | 60 | 440 | 24.15 | |
| 75000 | Motor Starter with Cutouts | 30 | 220 | 12.60 | 16.65 19.80 |
| 75000 | " " " " " " | 30 | 550 | 21.60 | 25.65 |

SMALL ENTRANCE SWITCHES

Trumbull Electric Closed or Open Ends

| Numbers | Amps | Volts | Fusing | 2 Pole | 3 Pole |
|-----------------------|------|-------|--------------------|--------|--------|
| 5790 Midget | 30 | 125 | For 1 Plug Fuse | \$1.80 | |
| 5791-2-3-4 & 5893 & A | 30 | 125 | Plug Fuses | 1.80 | \$3.45 |
| 13640-13641 | 30 | 250 | No Fuse-Slate Base | 2.70 | 4.15 |
| 13642-43 & 13743 & A | 30 | 250 | For Enclosed Fuses | 2.70 | 4.30 |
| 13221-13321 | 30 | 250 | " " " " | 3.40 | 5.15 |

MAIN ENTRANCE SWITCHES

Trumbull Electric Non Meter Test Solid End Wall

| | | | | | |
|----------------|-----|---------|----------------|--------|--------|
| 16361 to 16368 | 30 | 125-250 | For Plug Fuses | \$2.75 | \$3.45 |
| 16371 " 16378 | 30 | " | Enclosed Fuses | 3.05 | 3.75 |
| 16381 " 16388 | 60 | 250 | " | 8.50 | 9.00 |
| 16391 " 16398 | 100 | 250 | " | 15.10 | 16.00 |

METER SERVICE SWITCHES

Trumbull Electric For Meters Open End

| | | | | | |
|----------------|-----|---------|----------------|---------|---------|
| 16300 to 16309 | 30 | 125-250 | For Plug Fuses | \$ 2.75 | \$ 3.45 |
| 16315 " 16324 | 30 | " | Enclosed Fuses | 3.05 | 3.75 |
| 16330 " 16338 | 60 | " | " | 8.50 | 9.00 |
| 16341 " 16348 | 100 | " | " | 15.10 | 16.00 |

ACCESSIBLE FUSE METER SWITCHES

Trumbull Electric With Test Blades Without End Walls

| | | | | | |
|---------------|-----|---------|-----------------|---------|--------|
| 18111 | 30 | 125 | For 1 Plug Fuse | \$ 3.65 | |
| 18211-18311 | 30 | 125 | Plug Fuses | 4.00 | \$4.45 |
| 18121 | 30 | 125-250 | 1 Enclosed Fuse | 4.20 | |
| 18221-18321 | 30 | " | Enclosed Fuses | 4.85 | 4.85 |
| 18122-222-322 | 60 | " | " | 16.80 | 17.85 |
| 18123-223-323 | 100 | " | " | 25.60 | 27.50 |

Without End Walls and Without Test Blades

| | | | | | |
|---------------|-----|---------|-----------------|---------|--------|
| 19111 | 30 | 125 | For 1 Plug Fuse | \$ 3.35 | |
| 19211-19311 | 30 | 125-250 | Plug Fuses | 3.65 | \$4.00 |
| 19121 | 30 | " | 1 Enclosed Fuse | 3.85 | |
| 19221-19321 | 30 | " | Enclosed Fuses | 4.55 | 4.55 |
| 19122-222-322 | 60 | " | " | 16.00 | 16.80 |
| 19123-223-323 | 100 | " | " | 24.75 | 25.65 |

SEALED FUSE METER SWITCHES

Trumbull Electric With Test Blades Without End Walls

| | | | | | |
|-------------------|-----|---------|-----------------|---------|---------|
| 15827 | 30 | 125 | For 1 Plug Fuse | \$ 2.25 | |
| 28111-28211-28311 | 30 | 125 | Plug Fuses | 3.25 | \$ 3.45 |
| 28121 | 30 | 125 | 1 Enclosed Fuse | 3.50 | |
| 28221-28321 | 30 | 125-250 | Enclosed Fuses | 3.75 | 4.00 |
| 28122-28222-28322 | 60 | " | " | 15.10 | 16.00 |
| 28123-223-323 | 100 | " | " | 23.90 | 25.65 |

UNIVERSAL METER SERVICE SWITCHES

Trumbull Electric

| | | | | |
|----------|----------------------------------|--------|---------------|--|
| #971-123 | For Details See Trumbull Catalog | \$3.45 | Less End Wall | |
| 972-123 | " " " " | 4.30 | " | |
| 973-333 | " " " " | 3.75 | " | |
| 975-333 | " " " " | 4.85 | " | |
| 979-333 | " " " " | 4.85 | " | |

END WALLS, SHUTTERS, TROUGHS

Trumbull Electric

| | |
|---|--|
| One Piece End Wall for 30 Amp. Switch, \$.30 | For 60 & 100 A. Switches, \$.80 |
| Shutter for | .15 |
| Troughs—2-3 & 4'... | \$.37 5'...\$.41 6'...\$.44 7'...\$.52 8'...\$.55 |
| Distribution Cutout Block—#5850—Less Fuses | 1.10 |

TYPE "A" SWITCHES

Trumbull Electric Single Throw, Quick Make & Break

| | | 250 Volts Fusible | | 250 Volts Unfused | |
|-------|-------------|-------------------|----------------|-----------------------|----------------|
| Amps. | | 2 Pole | 3 Pole | 2 Pole | 3 Pole |
| 30 |#72221 | \$10.80 | #72321 \$12.60 | #36221 \$ 9.45 | #36321 \$11.25 |
| 60 |72222 | 13.50 | 72322 17.10 | | |
| 100 |72223 | 20.70 | 72323 27.00 | | |
| 200 |72224 | 32.40 | 72324 36.00 | | |
| | | 500 Volts Fusible | | 250-500 Volts Unfused | |
| Amps. | | 2 Pole | 3 Pole | 2 Pole | 3 Pole |
| 30 |#72251 | \$14.50 | #72351 \$18.00 | #36251 \$10.70 | #36351 \$13.95 |
| 60 |72252 | 16.40 | 72352 18.90 | 36252 10.70 | 36352 14.40 |
| 100 |72253 | 25.20 | 72353 28.80 | 36253 19.80 | 36353 21.60 |
| 200 |72254 | 39.60 | 72354 45.00 | 36254 25.25 | 36354 30.60 |

"R.M." & TYPE "A" SMALL STARTING SWITCHES

Trumbull Electric

| | | 30 Amp. | | 60 Amp. | |
|----------------------|------------|---------|---------------|---------------|---------------|
| 250 V. 2 Position | | 2 Pole | 3 Pole | 2 Pole | 3 Pole |
| 600 V. " " |#4261 | \$ 9.10 | #4321 \$10.35 | #4222 \$16.20 | #4322 \$18.90 |
| 110-550 Invers. Time |#3261 | 14.40 | #3361 16.20 | #4262 20.70 | #4362 23.40 |
| 250 " " " |8321 | 10.80 | #8361 11.70 | | |
| 600 " " " |8321 | 10.80 | #8361 13.05 | | |
| Snuff Arc |83261 | 14.85 | #8361 18.00 | | |

August, 1929

TYPE "C" SWITCHES

Trumbull Electric Single Throw, Quick Break Only

| | | 250 Volts Fusible | | 250 Volts Unfused | |
|-------|-------------|----------------------|----------------|-----------------------|----------------|
| Amps. | | 2 Pole | 3 Pole | 2 Pole | 3 Pole |
| 30 |#40221 | \$ 5.40 | #40321 \$ 6.75 | #20221 \$ 4.95 | #20321 \$ 6.30 |
| 60 |40222 | 8.10 | 40322 9.90 | | |
| 100 |40223 | 12.60 | 40323 15.30 | | |
| 200 |40224 | 19.80 | 40324 26.10 | | |
| | | 500 Volts AC Fusible | | 250-500 Volts Unfused | |
| Amps. | | 2 Pole | 3 Pole | 2 Pole | 3 Pole |
| 30 |#40251 | \$ 9.00 | #40351 \$ 8.55 | #20251 \$ 7.65 | #20351 \$ 8.10 |
| 60 |40252 | 9.90 | 40352 10.80 | 20252 8.10 | 20352 8.55 |
| 100 |40253 | 14.40 | 40353 17.10 | 20253 10.80 | 20353 12.15 |
| 200 |40254 | 28.80 | 40354 32.40 | 20254 18.90 | 20354 22.50 |

R. M. SAFETY SWITCHES

Trumbull Electric, All 30 Amp.

| Volts | Fused | Numbers | 2 Pole | 3 Pole | 4 Pole |
|------------|-----------|-------------------|---------|---------|---------|
| 250-600 AC | Not Fused | 46261-46361-46461 | \$ 5.40 | \$ 7.20 | \$ 9.90 |
| 250 Volts | Fusible | 92221-92321-92421 | 6.30 | 8.10 | 10.80 |
| 600 " AC | " | 92261-92361 | 13.05 | 13.95 | ..... |

TYPE "A" MOTOR STARTING SWITCHES

Trumbull Electric

| Phase | Numbers | Cycle | 110 Volt | 220 Volt | 440 Volt | 550 Volt |
|-------------|---------------------|-------|----------|----------|----------|----------|
| Single |95211-21-51-61 | 60 | \$22.25 | \$22.25 | \$25.20 | \$26.80 |
| |85211-21-51-61 | 25 | 22.25 | 22.80 | 30.45 | 31.60 |
| 3 Phase |96311-21-51-61 | 60 | 25.20 | 25.20 | 28.70 | 30.40 |
| |86311-21-51-61 | 25 | 25.20 | 26.30 | 35.10 | 36.00 |
| 2 " 3 Wire |98311-21-51-61 | 60 | 26.30 | 26.30 | 31.60 | 34.30 |
| |88311-21-51-61 | 25 | 26.30 | 28.30 | 37.00 | 38.70 |
| " " 4 " " |99411-21-51-61 | 60 | 40.95 | 40.95 | 45.40 | 45.70 |
| " " " " " " |89411-21-51-61 | 25 | 40.95 | 42.70 | 48.00 | 50.85 |

TUMBLER SWITCHES

Trumbull Electric

| | | | | | | | |
|-------|-------------|--------|-------------|-------|-------------|-------|-------------|
| #2221 |\$2.25 | #2221E |\$3.85 | #3221 |\$1.60 | #2361 |\$6.00 |
|-------|-------------|--------|-------------|-------|-------------|-------|-------------|

SMALL 30 AMP. MIDGET & TYPE "OO"

Westinghouse Residence Type

| | | 2 Pole | | 3 Pole | |
|---|--|--------|--------|---------|--------|
| Midget-Solid Neutral-1 Blade-1 Fuse | | #62613 | \$1.65 | ..... | ..... |
| Type 00 Fusible For Plug Fuses 125-250 V. | | #60969 | 1.85 | #60961 | \$3.00 |
| " Fusible Solid Neut. For Plug Fuses | | | | | |
| 125-250 Volts | | #60091 | 1.75 | #62328 | 2.70 |
| " Fusible Solid Neut. For Plug Fuses | | | | | |
| 3 Blades | | | | #60962 | 3.00 |
| " Non-Fusible 2 Blades 250 Volt | | #60990 | 2.55 | #62352 | 2.70 |
| " Non-Fusible 3 Blades 250 Volt | | | | #62365 | 4.00 |
| " Fusible For Cart. Fuses 250 Volt | | #60989 | 2.45 | #62363 | 4.30 |
| " Fusible For Cart. Fuses Solid Neut. | | | | #62351 | 3.15 |
| " Fusible For Cart. Fuses 3 Blade Solid Neutral | | | | | |
| Type WK-45 Fusible For Cart. Fuses 3 Blade 250 Volt | | | | #62364 | 4.30 |
| Type WK-45 Solid Neut. Cart. Fuses 250 V. | | | | #545101 | 5.25 |
| Type WK-45 Non-Fusible Cart. Fuses 250 V. | | | | #545341 | 5.20 |
| | | | | #545001 | 4.15 |

METER SERVICE SWITCHES

Westinghouse Type "WK-54" Without End Walls

| | | Dead Fuse Type | | Live Fuse Type | |
|-------|----------|--------------------|--------------|----------------|---------------|
| Amps. | Fused | 2 Pole | 3 Pole | 2 Pole | 3 Pole |
| 30 | Plug |61140 \$ 2.20 | ..... | 60224 \$ 2.70 | 59442 \$ 3.45 |
| 30 | " |61143 3.25 | 61142 \$3.45 | 59441 2.70 | 60225 3.45 |
| 30 | Enclosed |61639 3.50 | ..... | 54371 3.05 | 60227 3.75 |
| 30 | " |61145 3.75 | 61144 4.00 | ..... | 59448 3.75 |
| 60 | " |61150 15.05 | 61151 16.00 | 59461 8.45 | 60229 8.90 |
| 100 | " |61152 23.85 | 61153 25.50 | 59463 15.05 | 60232 15.95 |

POLYPHASE METER SWITCHES

Westinghouse "WK-54"

| | | 3 Pole Sealed Main Fuse Meter Testing | |
|---------------------------------|---------|---------------------------------------|---------|
| 30 Amp. No. 60997 With End Wall | \$11.50 | No. 60266 Less End Wall | \$11.00 |
| 60 " " 60998 " " " | 17.50 | " " " " | 16.50 |
| 100 " " 60999 " " " | 27.50 | " " " " | 26.00 |

ACCESSIBLE FUSE TYPE

Westinghouse "WK-65" Without End Walls

| | | With Test Facilities | | Without Test Facilities | |
|-------|----------|----------------------|--------------|-------------------------|--------------|
| Amps. | Fused | 2 Pole | 3 Pole | 2 Pole | 3 Pole |
| 30 | Plug |65000 \$ 3.65 | ..... | 65010 \$ 3.35 | ..... |
| 30 | " |65001 3.95 | 65002 \$4.50 | 65011 3.65 | 65012 \$3.95 |
| 30 | Enclosed |65055 4.20 | ..... | 65063 3.85 | ..... |
| 30 | " |65003 4.85 | 65004 4.85 | 65013 4.55 | 65014 4.55 |
| 60 | " |65005 16.80 | 65006 17.70 | 65015 15.95 | 65016 16.80 |
| 100 | " |65007 25.60 | 65008 27.40 | 65017 24.75 | 65018 25.60 |

POLYPHASE ACCESSIBLE METER SWITCHES

Westinghouse "WK-65"

| | | Meter Test Type | | Non Meter Test Type | |
|---------------------------------|--|-----------------|---------|---------------------|---------|
| 30 Amp. 3 Pole without End Wall | | No. 65100 | \$11.20 | No. 65103 | \$10.85 |
| 60 " " " " " | | No. 65101 | 20.35 | No. 65104 | 18.60 |
| 100 " " " " " | | No. 65102 | 30.00 | No. 65105 | 28.15 |

UNIVERSAL

Westinghouse "WK-57" Meter Service Switches Without End Walls. Sealed Main Fuses.

| | | For Full Details See | |
|--------------|--|----------------------|--------|
| All 30 Amp. | | Westinghouse | #57924 |
| 125 Volt | | Switch Catalog #282 | 57925 |
| Standardized | | | 57926 |
| | | | 57928 |
| | | | 57929 |
| | | | 57931 |

Switches

Bulldog

| | |
|---|--------|
| 2 Pole—125 Volt—Fusible—For Plug Fuses No. JE211 S & P..... | \$1.65 |
| 2 Pole—125 Volt—Fusible—For Plug Fuses No. JE211S..... | 2.70 |
| 2 Pole—250 Volt—Fusible—For Cart. Fuses SF221 S & P..... | 2.50 |
| 2 Pole—250 Volt—Not Fusible—For Cart. Fuses SN221 S & P..... | 2.70 |
| 3 Pole—125 Volt—Fusible—For Plug Fuses No. JE311 SP & PG..... | 3.00 |
| 3 Pole—125 Volt—Fusible—For Plug Fuses Quick Make & Break JF311S..... | 4.35 |

"TYPE A"

Bulldog Single Throw Quick Make and Break

| 250 Volts Fusible | 2 Pole | | 3 Pole | |
|-------------------------|--------|--------------|--------|----------|
| | Number | Price | Number | Price |
| 30 Amp. | SF-221 | \$ 10.80 | SF-321 | \$ 12.60 |
| 60 " | SF-222 | 13.50 | SF-322 | 17.10 |
| 100 " | SF-223 | 20.70 | SF-323 | 27.00 |
| 200 " | SF-224 | 32.40 | SF-324 | 36.00 |
| 400 " | SF-225 | 63.00 | SF-325 | 81.00 |
| 500-600 Volts Fusible | | | | |
| 30 Amp. | | For | SF-351 | 18.00 |
| 60 " | | 2 Pole | SF-352 | 19.90 |
| 100 " | | See 600 Volt | SF-353 | 28.80 |
| 200 " | | Fusible | SF-354 | 45.00 |
| 400 " | | Below | SF-355 | 88.00 |
| 250-500-600 Not Fusible | | | | |
| 30-60 Amp. | SN-251 | \$11.70 | SN-351 | 13.95 |
| 100 " | SN-253 | 19.80 | SN-353 | 21.60 |
| 200 " | SN-254 | 25.20 | SN-354 | 30.60 |
| 400 " | SN-255 | 54.00 | SN-355 | 63.00 |
| 600 Volts Fusible | | | | |
| 30 Amp. | SF-261 | 16.20 | SF-361 | 19.30 |
| 60 " | SF-262 | 17.10 | SF-362 | 19.80 |
| 100 " | SF-263 | 27.00 | SF-363 | 31.70 |
| 200 " | SF-264 | 42.00 | SF-364 | 48.60 |
| 400 " | SF-265 | 93.00 | SF-365 | 122.00 |
| 600 Volts Not Fusible | | | | |
| 30-60 Amp. | SN-261 | 12.60 | SN-361 | 16.20 |
| 100 " | SN-263 | 20.25 | SN-363 | 24.75 |
| 200 " | SN-264 | 26.50 | SN-364 | 33.75 |
| 400 " | SN-265 | 65.50 | SN-365 | 87.75 |
| 250 Volts Fusible | | | 4 Pole | |
| 30 Amp. | | | Number | Price |
| 60 " | | | SF-421 | \$ 16.20 |
| 100 " | | | SF-422 | 21.60 |
| 200 " | | | SF-423 | 36.00 |
| 400 " | | | SF-424 | 54.00 |
| 500-600 Volts Fusible | | | SF-425 | 108.00 |
| 30 Amp. | | | SF-451 | 21.60 |
| 60 " | | | SF-452 | 23.40 |
| 100 " | | | SF-453 | 47.80 |
| 200 " | | | SF-454 | 57.60 |
| 400 " | | | SF-455 | 126.00 |
| 250-500-600 Not Fusible | | | | |
| 30-60 Amp. | | | SN-451 | 19.80 |
| 100 " | | | SN-453 | 28.80 |
| 200 " | | | SN-454 | 40.00 |
| 400 " | | | SN-455 | 103.50 |
| 600 Volts Fusible | | | | |
| 30 Amp. | | | SF-461 | 23.40 |
| 60 " | | | SF-462 | 25.20 |
| 100 " | | | SF-463 | 39.60 |
| 200 " | | | SF-464 | 59.40 |
| 400 " | | | SF-465 | 144.00 |
| 600 Volts Not Fusible | | | | |
| 30-60 Amp. | | | SN-461 | 21.75 |
| 100 " | | | SN-463 | 29.70 |
| 200 " | | | SN-464 | 43.65 |
| 400 " | | | SN-465 | 120.60 |

COMPENSATOR SWITCHES "A"

Bulldog Quick Make & Break Fusible

| Amps. | | 250 Volt AC | | | |
|--------|---------|-------------|---------|---------|--|
| | | 3 Pole | | 4 Pole | |
| 30 A. | SF321 C | \$16.20 | SF421 C | \$21.60 | |
| 60 A. | SF322 C | 20.25 | SF422 C | 26.10 | |
| 100 A. | SF323 C | 31.50 | SF423 C | 46.80 | |
| 200 A. | SF324 C | 45.90 | SF424 C | 64.80 | |
| 400 A. | SF325 C | 94.50 | SF425 C | 129.00 | |

| Amps. | | 500-600 Volts AC | | | |
|--------|---------|------------------|---------|---------|--|
| | | 3 Pole | | 4 Pole | |
| 30 A. | SF351 C | \$20.70 | SF451 C | \$32.40 | |
| 60 A. | SF352 C | 21.00 | SF452 C | 36.00 | |
| 100 A. | SF353 C | 33.75 | SF453 C | 61.20 | |
| 200 A. | SF354 C | 50.40 |  | ..... |  |
| 400 A. | SF355 C | 105.60 |  | ..... |  |

MOTOR STARTERS

Bulldog

| 30 | Amp-Type | C-Porc. | Base-110 to 440 Volt | 3 Pole | |
|----|----------|-----------|----------------------|---------|---------|
| 30 | " | " C Slate | " 440 & 550 " | JM-321S | \$ 6.75 |
| 30 | " | " A | " 250 Volt | JM-351 | 11.70 |
| 30 | " | " A | " 500 " | MF-321 | 17.00 |
| 60 | " | " A | " 250 " | MF-351 | 23.75 |
| 60 | " | " A | " 500 " | MF-322 | 23.50 |
| 60 | " | " A | " 500 " | MF-352 | 26.80 |

| 30 | Amp-Type | C-Porc. | Base-110 to 440 Volt | 4 Pole | |
|----|----------|-----------|----------------------|--------|---------|
| 30 | " | " C-Slate | " 440 & 550 " |  | ..... |
| 30 | " | " A | " 250 Volt | MF-421 | \$22.80 |
| 30 | " | " A | " 500 " | MF-451 | 35.25 |
| 60 | " | " A | " 250 " | MF-422 | 29.45 |
| 60 | " | " A | " 500 " | | |

NOTE: For Bulldog Switches not listed deduct 10% from Bulldog List.

Columbia, 30 Amp.

| Description | | | | 3 Pole |
|--------------|--------------|---------------------------|--|----------------|
| Single Fused | Single Blade | 125 Volt-Plug Fused | | 320-321 \$1.50 |
| Double | Double | 125 " " " | | 1980 1.50 |
| " | " | " " " " | | 3930 1.50 |
| " | " | " " 250 " Cartridge Fused | | 323 2.25 |
| " | " | " " 250 " " " | | 423 2.00 |
| Description | | | | 3 Pole |
| Single Fused | Single Blade | 125 Volt-Plug Fused | | 1931-3 \$2.15 |
| Double | Double | 125 " " " | | 3930-1 2.50 |
| " | " | " " " " | | 323 4.00 |
| " | " | " " 250 " Cartridge Fused | | 423 4.50 |
| " | " | " " 250 " " " | | |

BRANCH CIRCUIT ENTRANCE SWITCHES

Columbia

| 30 Amp. Series | 2 Circuit | | 4 Circuit | | 6 Circuit | | 8 Circuit | |
|----------------------|--------------|--------|--------------|--------|--------------|--------|--------------|--------|
| | 2 Pole | 3 Pole | 2 Pole | 3 Pole | 2 Pole | 3 Pole | 2 Pole | 3 Pole |
| 2401 to 2406 | \$4.00 | \$5.00 | \$5.35 | \$6.00 | \$6.35 | \$7.35 | \$7.35 | \$8.75 |
| 3401 to 3406 | 5.00 | 6.35 | 6.65 | 7.35 | 8.70 | 9.75 | | |
| 3501 to 3506 | 4.85 | 6.00 | 6.35 | 7.00 | 7.70 | 8.70 | | |

INDUSTRIAL SWITCHES

Columbia

Series 70 Type C Fusible

| | Amps | 2 Pole | 3 Pole |
|------------|--------|---------------|---------------|
| | Number | Price | Number Price |
| 250 Volts | 30A | C7001 \$ 9.40 | C7002 \$11.80 |
| Fusible | 60A | C7004 12.10 | C7005 15.75 |
| Quick Make | 100A | C7007 19.10 | C7008 24.00 |
| & Break | 200A | C7010 28.35 | C7011 35.00 |

Series 70 Type A Fusible

| | 2 Pole | | 3 Pole | |
|------------|--------|---------------|--------|---------|
| | Amps | Number Price | Number | Price |
| 250 Volts | 30A | A7001 \$10.45 | A7002 | \$13.00 |
| Fusible | 60A | A7004 13.30 | A7005 | 17.55 |
| Quick Make | 100A | A7007 21.75 | A7008 | 27.90 |
| & Break | 200A | A7010 31.00 | A7011 | 39.00 |

Series 71-500 Volts Fusible

| | Amps | 2 Pole | | 3 Pole | |
|------------------------------------|------|--------|---------|--------|---------|
| | | Number | Price | Number | Price |
| 500 Volts Quick Make & Break | 30A | 7101 | \$13.60 | 7102 | \$15.75 |
| | 60A | 7104 | 14.15 | 7105 | 16.10 |
| | 100A | 7107 | 23.80 | 7108 | 27.00 |
| | 200A | 7110 | 38.25 | 7111 | 42.80 |

Series 73-500 Volts Unfused

| | Amps | 2 Pole | 3 Pole | Price |
|------------|--------|--------|--------|---------|
| | Number | Price | Number | |
| 500 Volts | 30A | 7301 | 7302 | \$12.90 |
| Quick Make | 60A | 7304 | 7305 | 15.40 |
| & Break | 100A | 7307 | 7308 | 19.50 |
| | 200A | 7310 | 7311 | 28.80 |

Series 72-600 Volts Fusible

| | 2 Pole | | 3 Pole | |
|-----------------------|--------|--------------|--------|---------|
| | Amps | Price | Amps | Price |
| 600 Volts | 30A | 7201 \$14.80 | 7202 | \$16.25 |
| Quick Make & Break | 60A | 7204 14.80 | 7205 | 16.75 |
| | 100A | 7207 24.50 | 7208 | 27.00 |
| | 200A | 7210 39.00 | 7211 | 43.00 |

Series 74-600 Volts Unfused

| | 2 Pole | | 8 Pole | | Price |
|-----------------------|--------|--------|--------|------|---------|
| | Amps | Number | Number | | |
| 600 Volts | 30A | 7401 | | 7402 | \$14.50 |
| Quick Make & Break | 60A | 7404 | | 7405 | 15.10 |
| | 100A | 7407 | | 7408 | 21.75 |
| | 200A | 7410 | | 7411 | 29.50 |

Series 20-250 Volts Fusible

| | | 2 Pole | | 3 Pole | |
|----------------------------------|------|--------|---------|--------|---------|
| | Amps | Number | Price | Number | Price |
| Quick Break Only 250 Volts | 30A | 2022 | \$ 5.15 | 2023 | \$ 6.95 |
| | 60A | 2025 | 6.95 | 2026 | 8.00 |
| | 100A | 2028 | 10.95 | 2029 | 13.50 |
| | 200A | 2031 | 19.35 | 2032 | 24.90 |

Series 23-250-500 Volts Unfused

| | Amps | 2 Pole | | 3 Pole | |
|-------------|------|--------|---------|--------|---------|
| | | Number | Price | Number | Price |
| Quick Break | 30A | 2322 | \$ 4.85 | 2323 | \$ 6.35 |
| Only | 60A | 2325 | 9.10 | 2326 | 9.70 |
| 350 Volts | 100A | 2328 | 11.50 | 2329 | 12.70 |
| | 200A | 2331 | 19.40 | 2332 | 23.00 |

Series 30—Quick Break—250 Volts For Meter Trims

| | | |
|-------------|--------------|--------------|
| | 30 Amp. | 60 Amp. |
| 2 Pole..... | 3022 \$5.65 | 3025 \$ 8.90 |
| 3 Pole..... | 3023 7.65 | 3026 10.00 |
| | 100 Amp. | 200 Amp. |
| 2 Pole..... | 3028 \$12.70 | 3031 \$16.35 |
| 3 Pole..... | 3029 16.30 | 3032 24.35 |

MOTOR STARTING SWITCHES

Columbia, 250 Volts

| | 2 Pole | 3 Pole |
|---------------------------------|--------------|--------------|
| 30 Amp. Motor Start Switch..... | 6001 \$12.70 | 6002 \$17.00 |
| 60 " " " " | 6004 12.30 | 6005 17.45 |
| | 4 Pole | |
| 30 Amp. Motor Start Switch..... | 6003 \$20.00 | |
| 60 " " " " | 6006 27.20 | |

Noark

Nublade Switch



"I'm Sold"

"Yes, sir, I'm sold on NUBLADE Switches for general industrial uses.

"In addition to its new type of blade, which insures perfect alignment and better contact, look at that unit block construction! Look at the way it helps replacement if needed! Look at the room it leaves for wiring!

"It's there forty ways."

COLT'S PATENT FIRE ARMS MFG. CO.

ELECTRICAL DIVISION

HARTFORD, CONNECTICUT, U. S. A.



33-N-32

NEW YORK • BOSTON • PHILADELPHIA • CHICAGO • SAN FRANCISCO

Nublade Switches

Are standard in

30, 60, 100, 200, 400 and 600 amp.

250 volt A. C. or D. C. 600 volt A. C.

2, 3, 4 and 5 pole types

Quick Make and Quick Break
Single Throw

Externally Operated

Outside Lockoff



offers you

a

Profitable Line

Meet the demand for color in the home by supplying CST Color Plates. Wide variety of colors and finishes at a range of prices to make sales easy and profitable.

Made in all types and gangs up to six as well as any combination style. Lacquer Brass Finish and a new Krinkle Brass Plate are standard as are twenty different colors.

Write for our descriptive booklet covering this line as well as a sample of the new plates, which will be furnished on request.

*and
don't forget*

CST CONDUIT FITTINGS

Locknuts, Bushings, Connectors, Hickeys, Pipe Straps—nearly everything you need—and the CST label insures its quality.

Write for our new Fittings bulletin

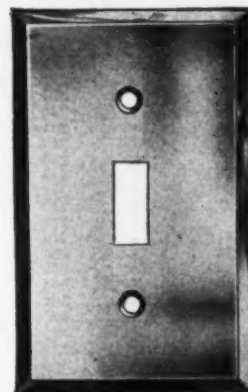
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CHICAGO STEEL TANK CO.

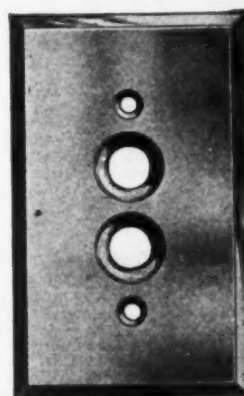
ELECTRICAL DIVISION

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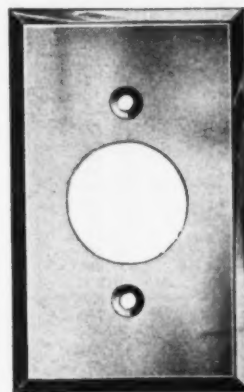
CHICAGO, ILLINOIS



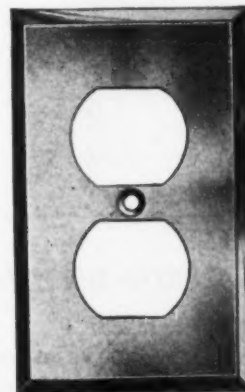
Toggle



Push Button



Single Receptacle



Duplex Receptacle

Wadsworth

| 30 Amp. Switches | | 30 Amp. Switches | | 30 Amp. Switches | | 30 Amp. Switches | |
|------------------|--------|------------------|--------|------------------|--------|------------------|--------|
| No. | Price | No. | Price | No. | Price | No. | Price |
| 8 | \$1.90 | 223 | \$2.40 | 1014 | \$6.10 | 2330 | \$8.50 |
| 12 | 1.00 | 224 | 3.00 | 1202 | 3.95 | 2334 | 9.20 |
| 15 | 1.25 | 235 | 3.75 | 1203 | 4.25 | 2441 | 6.55 |
| 17 | 3.30 | 241 | 5.05 | 1212 | 4.25 | 2461 | 6.55 |
| 21 | 3.30 | 242 | 4.70 | 1223 | 4.75 | 2462 | 6.20 |
| 25 | 2.20 | 243 | 5.05 | 1250 | 3.65 | 2463 | 6.55 |
| 25T | 3.10 | 244 | 4.70 | 1322 | 4.15 | 2464 | 6.20 |
| 26 | 2.65 | 271 | 4.00 | 1323 | 4.75 | 2534 | 6.75 |
| 27 | 2.50 | 272 | 4.00 | 1401 | 4.10 | 2632 | 3.25 |
| 30 | 1.55 | 273 | 4.70 | 1402 | 3.95 | 2633 | 4.65 |
| 31T | 2.75 | 274 | 4.40 | 1403 | 4.25 | 2639 | 4.65 |
| 33 | 1.65 | 284 | 4.80 | 1401T | 4.60 | 3032 | 11.15 |
| 33T | 2.90 | 292 | 4.00 | 1402T | 4.55 | 3033 | 12.00 |
| 38 | 2.50 | 294 | 5.35 | 1403T | 4.80 | 3532 | 9.10 |
| 39 | 3.75 | 322 | 6.20 | 1411 | 4.50 | 3533 | 10.00 |
| 99 | .10 | 331 | 4.85 | 1411T | 5.15 | 3534 | 13.30 |
| 100 | .10 | 332 | 6.55 | 1412 | 4.25 | 3539 | 10.00 |
| 101 | .50 | 340 | 4.75 | 1412T | 5.20 | 3632 | 16.80 |
| 131 | 3.90 | 341 | 5.05 | 1423 | 4.75 | 3633 | 21.15 |
| 132 | 3.30 | 330 | 3.20 | 1423T | 5.45 | 3634 | 22.05 |
| 133 | 3.90 | 362 | 4.15 | 1450 | 3.65 | 3639 | 21.10 |
| 141 | 4.15 | 370 | 4.15 | 1450T | 4.25 | 8531 | 8.90 |
| 142 | 3.75 | 372 | 4.95 | 1451 | 3.95 | 8532 | 8.45 |
| 143 | 4.15 | 380 | 4.65 | 1451T | 4.60 | 8533 | 9.75 |
| 144 | 4.55 | 382 | 4.70 | 1612 | 4.05 | 8534 | 12.45 |
| 145 | 4.95 | 392 | 5.05 | 1632 | 9.85 | 8539 | 9.75 |
| 151 | 3.40 | 440 | 6.20 | 1643 | 4.25 | 9531 | 15.45 |
| 152 | 3.00 | 441 | 6.55 | 2202 | 4.80 | 9532 | 12.70 |
| 153 | 3.40 | 443 | 6.55 | 2203 | 4.80 | 9533 | 15.45 |
| 154 | 4.45 | 461 | 6.55 | 2230 | 9.75 | 9534 | 17.75 |
| 211 | 4.15 | 462 | 6.20 | 2212 | 5.10 | 9539 | 15.45 |
| 212 | 3.75 | 463 | 6.55 | 2223 | 5.10 | 9862 | 8.45 |
| 213 | 4.15 | 464 | 6.20 | 2234 | 11.25 | 9863 | 8.90 |
| 214 | 3.75 | 633 | 5.35 | 2251 | 4.50 | 9864 | 13.90 |
| 221 | 2.65 | 734 | 11.15 | 2284 | 6.20 | | |
| 222 | 3.00 | 1013 | 4.20 | 2294 | 6.55 | | |

Wadsworth

| 60 Amp. Switches | | 100 Amp. Switches | | 200 Amp. Switches | |
|------------------|---------|-------------------|---------|-------------------|---------|
| No. | Price | Number | Price | Number | Price |
| 161 | \$ 9.60 | 102 | \$15.70 | 522 | \$19.80 |
| 162 | 9.15 | 110 | 16.55 | 523 | 24.95 |
| 163 | 11.80 | 111 | 16.55 | 722 | 37.05 |
| 171 | 9.35 | 112 | 15.70 | 723 | 51.90 |
| 172 | 9.15 | 113 | 18.95 | 724 | 57.35 |
| 503 | 11.45 | 513 | 17.25 | 729 | 52.00 |
| 1024 | 13.30 | 1033 | 11.55 | 1042 | 14.20 |
| 1762 | 16.30 | 1034 | 16.50 | 1043 | 22.00 |
| 1763 | 22.75 | 1712 | 27.35 | 1044 | 31.35 |
| 1764 | 21.45 | 1713 | 35.40 | 2622 | 18.15 |
| 1769 | 21.70 | 1714 | 35.00 | 2623 | 21.45 |
| 1800 | 15.70 | 1719 | 30.90 | 2624 | 40.85 |
| 1802 | 16.55 | 1900 | 24.35 | 2629 | 19.80 |
| 1803 | 17.40 | 1902 | 25.20 | 2812 | 11.55 |
| 1812 | 17.40 | 1903 | 26.10 | 2813 | 14.65 |
| 1830 | 19.10 | 1912 | 26.10 | 2819 | 13.90 |
| 1834 | 20.90 | 1930 | 28.70 | 3212 | 10.20 |
| 1842 | 17.42 | 1934 | 30.50 | 3213 | 11.55 |
| 1843 | 18.25 | 1942 | 26.10 | 3522 | 27.20 |
| 1851 | 16.55 | 1943 | 27.90 | 3523 | 31.15 |
| 2030 | 15.65 | 1951 | 26.10 | 3524 | 43.15 |
| 2034 | 17.40 | 2130 | 25.20 | 3529 | 31.15 |
| 2042 | 15.70 | 2134 | 26.95 | 3622 | 41.60 |
| 2043 | 16.55 | 2142 | 24.40 | 3623 | 47.35 |
| 2051 | 14.80 | 2143 | 26.10 | 3624 | 53.20 |
| 2664 | 13.30 | 2151 | 24.40 | 3629 | 47.35 |
| 2861 | 8.45 | 2614 | 25.60 | 4603 | 54.45 |
| 2862 | 8.00 | 3512 | 14.65 | 4643 | 59.40 |
| 2863 | 9.30 | 3513 | 17.75 | 4630 | 59.75 |
| 2869 | 9.30 | 3514 | 25.60 | 4634 | 64.70 |
| 3162 | 15.95 | 3519 | 17.75 | | |
| 3163 | 17.75 | 3612 | 24.85 | | |
| 3262 | 8.00 | 3613 | 31.95 | | |
| 3263 | 8.45 | 3614 | 35.90 | | |
| 3562 | 9.75 | 3619 | 31.95 | | |
| 3563 | 11.55 | 8511 | 14.65 | | |
| 3564 | 13.75 | 8512 | 12.45 | | |
| 3569 | 11.55 | 8513 | 15.55 | | |
| 3662 | 17.05 | 8514 | 27.50 | | |
| 3663 | 22.05 | 8519 | 15.55 | | |
| 3664 | 24.00 | 9511 | 29.30 | | |
| 3-49 | 22.05 | 9512 | 24.85 | | |
| 8561 | 9.30 | 9513 | 29.30 | | |
| 8562 | 8.90 | 9514 | 39.00 | | |
| 8563 | 10.20 | 9519 | 29.30 | | |
| 8564 | 14.20 | 9812 | 10.65 | | |
| 8569 | 10.20 | 9813 | 12.00 | | |
| 9561 | 18.55 | 9814 | 21.45 | | |
| 9562 | 14.65 | | | | |
| 9563 | 18.55 | | | | |
| 9564 | 23.25 | | | | |
| 9569 | 18.55 | | | | |

400 Amp. Switches

| No. | Price |
|------|---------|
| 642 | \$35.45 |
| 643 | 67.65 |
| 742 | 61.65 |
| 743 | 75.13 |
| 744 | 91.30 |
| 749 | 75.15 |
| 1052 | 36.30 |
| 1053 | 47.85 |
| 1054 | 66.00 |
| 2542 | 49.50 |
| 2543 | 61.00 |
| 2544 | 86.65 |
| 3512 | 54.45 |
| 3543 | 78.40 |
| 3544 | 94.05 |
| 3549 | 78.35 |
| 4803 | 99.00 |
| 4830 | 129.35 |
| 4834 | 137.55 |
| 4843 | 112.20 |

EXTRA END WALLS—SHUTTERS—TRIMS—ETC.

| Wadsworth | | Knock-Meter | |
|-------------------------------|--------|-------------|---------|
| Type of Trim | | Shutter | |
| For 30 Amp. 125 Volt Switches | Flat | Extended | Shutter |
| " 30 " 250 " 2 Pole | \$.30 | \$.50 | \$.30 |
| " 60 " 250 " 3 " " | .50 | .65 | .35 |
| " 60 " 250 " 3 " " | .65 | .83 | .45 |
| " 100 " 250 " 3 " " | .75 | .90 | .50 |
| " 100 " 250 " 3 " " | .82 | 1.00 | .55 |
| " 200 " 250 " 3 " " | .90 | 1.10 | .60 |
| " 200 " 250 " 3 " " | 1.00 | 1.15 | .65 |
| " 200 " 250 " 3 " " | 1.10 | 1.25 | .75 |

Murray Switches

ENTRANCE SWITCHES

| With End Wall | Description | No. | Price | No. | Price |
|---------------|--------------------------------|-----|---------|-----|--------|
| Amps. Volts | For Plug Fuses 1 Blade 1 Fuse | 630 | \$ 1.50 | 230 | \$2.25 |
| 30 125 | " " " 2 " 2 " | 231 | 1.65 | 831 | 2.10 |
| 30 125-250 | " " " " " " | | | 830 | 3.55 |
| 30 125-250 | For 2 Cartridge Fuses | | | 760 | 17.40 |
| 60 250 | " 3 Cart. Fuses-3 Phase-3 Wire | | | 769 | 20.00 |
| 60 250 | " 3 " " 4 " 4 " | | | 710 | 29.05 |
| 100 250 | " 3 " " 3 " 3 " | | | 712 | 29.95 |
| 100 250 | " 3 " " 3 " 3 " | | | 720 | 60.75 |
| 200 250 | " 3 " " 3 " 3 " | | | 722 | 68.85 |

ACCESSIBLE MAIN FUSE SWITCHES

| Meter Test Type | Without End Walls | 2 Pole | Price | 3 Pole | Price |
|-----------------|-------------------------|--------|---------|--------|---------|
| Amps. Volts | Description | No. | Price | No. | Price |
| 30 125 | For Plug Fuses One Fuse | 755 | \$ 3.65 | 756 | \$ 4.45 |
| 30 125 | " " " 2 & 3 Fuse | 748 | 3.95 | 749 | 4.85 |
| 30 250 | " Cart. " One Fuse | 738 | 4.20 | 739 | 4.85 |
| 30 250 | " " " Two Fuse | 737 | 4.85 | 738 | 5.45 |
| 60 250 | " " " For 1 Fuse | 766 | 15.95 | 767 | 17.70 |
| 60 250 | " " " For 2 Fuse | 764 | 16.85 | 765 | 17.70 |
| 100 250 | " " " For 2 Fuse | 718 | 25.60 | 719 | 27.40 |

| Meter Test | 3 Phase | 3 & 4 Wire Type | Without End Walls | 2 Pole | Price | 3 Pole | Price |
|------------|----------------------------------|-----------------|-------------------|--------|---------|--------|-------|
| 60 250 | For 3 Cart. Fuses-3 Phase-3 Wire | | | 767 | \$19.90 | | |
| 60 250 | " 3 " " 3 " 4 " | | | 768 | 23.00 | | |
| 100 250 | " 3 " " 3 " 4 " | | | 711 | 30.00 | | |
| 100 250 | " 3 " " 3 " 4 " | | | 714 | 32.45 | | |
| 200 250 | " 3 " " 3 " 4 " | | | 721 | 64.80 | | |
| 200 250 | " 3 " " 3 " 4 " | | | 723 | 72.90 | | |

"UNISAFTI"

(Universal Standardized Switches)

| Number | Pole | Fuse | Neutral | All 30 Amps. | Branches & Fusing | Price |
|--------|------|--------|---------|--------------|-------------------|--------|
| 234 | 2 | Single | | 1-2-Wire | 2 Fuses | \$3.25 |
| 235B | 2 | " | | 2-2- | " | 3.25 |
| 236 | 2 | " | | 4-2- | " | 4.30 |
| 237 | 2 | Two | Solid | 1-3- | " | 3.75 |
| 237 | 2 | " | " | 1-2- | " | 3.75 |
| 238 | 3 | " | Solid | 2-2- | " | 4.85 |
| 238 | 3 | " | " | 4-2- | " | 4.85 |
| 238 | 2 | " | " | 2-2- | " | 4.85 |

METER SERVICE SWITCHES

| Fuses & Blades Dead | | Sealed Fuses | | | |
|---------------------|-------|-----------------|-------|---------|-------------------|
| Amp. | Volts | Description | No. | Price | Without End Walls |
| 30 | 125 | For Plug Fuses | 232 | \$ 2.20 | 233 |
| 60 | 250 | For Cart. Fuses | 364 | 15.05 | 365 |
| | | | | | 3 Pole |
| | | | | | Price |
| Fuses Alive | | | | | |
| 30 | 125 | For Plug Fuses | 330-1 | \$ 2.65 | 333 |
| 30 | 250 | For Cart. Fuses | 130 | 2.65 | 133 |
| 60 | 250 | " " " | 360 | 8.45 | 361-3 |
| 100 | 250 | " " " | 310 | 15.05 | 313-4 |
| | | | | | 15.95 |

| Fuses Alive | Sealed Fuses | Without End Walls | 2 Pole | Price | 3 Pole | Price |
|-------------|-----------------|-------------------|---------|-------|---------|-------|
| 30 125 | For Plug Fuses | 330-1 | \$ 2.65 | 333 | \$ 3.35 | |
| 30 250 | For Cart. Fuses | 130 | 2.65 | 133 | 3.35 | |
| 60 250 | " " " " | 360 | 8.45 | 361-3 | 8.90 | |
| 100 250 | " " " " | 310 | 15.05 | 313-4 | 15.95 | |

SEALABLE MAIN FUSES

Polyphase—3 Wire

| 3 Pole-3 Blades-For Cart. Fuses 250V. | 30 Amp. | 60 Amp. | 100 Amp. |
|---------------------------------------|-------------|-------------|-------------|
| | 332 \$11.10 | 362 \$16.80 | 311 \$26.50 |

TYPE C SWITCHES

| Quick Break | | 2 Pole | Price | 3 Pole | Price | 4 Pole | Price |
|-------------|-----------------------|--------|---------|--------|---------|--------|---------|
| Amps. | Description | No. | Price | No. | Price | No. | Price |
| 30 | Solid Neutral 125-250 | 632 | \$ 3.35 | 633 | \$ 4.40 | 634 | \$ 8.70 |
| 60 | " " " " " " | 661 | 8.35 | 663 | 9.45 | 664 | 12.15 |
| 60 | Solid Neutral 125-250 | 665 | 9.45 | 666 | 9.45 | 667 | 9.45 |
| 100 | " " " " " " | 611 | 13.30 | 612 | 16.20 | 613 | 17.10 |
| 100 | Solid Neutral 125-250 | 611 | 13.30 | 612 | 16.20 | 613B | 17.10 |
| 200 | " " " " " " | 621 | 23.40 | 623 | 28.80 | 624 | 51.30 |
| 200 | Solid Neutral 125-250 | 621 | 23.40 | 623 | 28.80 | 624B | 51.30 |
| 200 | " " " " " " | 622 | 28.80 | 623B | 30.15 | | |

END WALLS, PLATES & TROUGHS & ADAPTORS

| End Wall | 30 Amp. | 60 Amp. | 100 Amp. |
|-------------------------------|---------|---------|----------|
| Shutter | \$.30 | \$.65 | \$1.00 |
| Closure Plate | .15 | .25 | .25 |
| Trough Cover & Adapting Slide | .30 | .30 | .30 |
| Trough 2" 3 & 4" | .15 | .15 | .15 |
| " 5" | | | .40 |
| " 6" | | | .45 |
| " 7" | | | .50 |
| " 8" | | | .55 |
| " 9" | | | .60 |
| " 10" | | | .65 |

Switches

Solder

Diamond E Switches

SMALL ENTRANCE SWITCHES, 30 AMPS.

| Volts | For Fuses | Description | 2 Pole | 3 Pole |
|-------|-----------|----------------|------------|------------|
| 125 | Plug | All Fused | P-2 \$1.65 | P-3 \$2.75 |
| 125 | Plug | Ground Neutral | P-2S 1.65 | P-3S 2.25 |
| 250 | Cartridge | All Fused | C-2 2.25 | C-3 4.00 |
| 250 | Cartridge | Ground Neutral | ..... | C-3S 2.90 |

ALL-N-ONE SWITCHES

| Live Front No. | Double Fuse Circuits | Price | Dead Front No. | Single Fuse Circuits | Price |
|----------------|----------------------|--------|----------------|----------------------|---------|
| A-2 | 2 | \$3.45 | AD-3 | 3 | \$ 5.40 |
| A-3 | 3 | 3.80 | AD-4 | 4 | 5.85 |
| A-5 | 5 | 4.15 | AD-5 | 5 | 6.75 |
| A-7 | 7 | 6.60 | AD-6 | 6 | 7.95 |
| A-9 | 9 | 6.95 | AD-8 | 8 | 9.30 |
| | | | AD-10 | 10 | 11.25 |

RANGE & WATER HEATER SWITCHES

60 Amp.—125 Volts

| No. 501 | No. 502 | No. 503 | No. 504 | No. 505 | No. 506 | No. 507 |
|---------|---------|---------|---------|---------|---------|---------|
| \$9.90 | \$15.25 | \$23.60 | \$26.75 | \$20.25 | \$8.90 | \$13.00 |

MOTOR STARTING SWITCHES

| | |
|--|--------|
| MS-1 30 Amp. 3 Pole 220 Volts Quick Make & Break Toggle..... | \$6.00 |
| C-3P 30 Amp. 3 Pole 250 Volts Not Toggle..... | 7.10 |

SAFE LINE SERVICE SWITCHES

| | |
|--|--------|
| No. 904 Single Pole 4 Circuits with Transformer..... | \$7.85 |
| " " " " " without Transformer..... | 6.60 |

INDUSTRIAL TYPE

Quick Break—Single Throw—Fused Bottom

| Amp. | No. | Price | 250 Volts No. | Price | No. | Price |
|------|-------|---------|---------------|---------|-------|---------|
| 30 | 3022 | \$ 5.40 | 3032 | \$ 6.75 | 3042 | \$ 7.90 |
| 60 | 6022 | 8.10 | 6032 | 9.00 | 6042 | 11.65 |
| 100 | 10022 | 11.65 | 10032 | 13.30 | 10042 | 24.10 |
| 200 | 20022 | 18.25 | 20032 | 24.10 | 20042 | 39.75 |
| 400 | 40022 | 44.85 | 40032 | 61.50 | 40042 | 87.20 |
| 600 | 60022 | 78.00 | 60032 | 91.30 | 60042 | 131.10 |

| Amp. | No. | Price | 500 Volts No. | Price | No. | Price |
|------|-------|---------|---------------|---------|-------|----------|
| 30 | 3025 | \$ 9.00 | 3035 | \$ 8.55 | 3045 | \$ 12.45 |
| 60 | 6025 | 9.90 | 6035 | 10.80 | 6045 | 13.30 |
| 100 | 10025 | 13.30 | 10035 | 15.80 | 10045 | 26.60 |
| 200 | 20025 | 26.60 | 20035 | 30.00 | 20045 | 43.20 |
| 400 | 40025 | 68.00 | 40035 | 74.70 | 40045 | 116.20 |
| 600 | 60025 | 96.30 | 60035 | 103.00 | 60045 | 167.70 |

| Amps..... | 30 Amp. | 60 Amp. | 100 Amp. | 200 Amp. |
|-------------|---------|---------|----------|----------|
| Number..... | 3026 | 6026 | 10026 | 20026 |
| Price..... | \$15.30 | \$15.80 | \$25.00 | \$38.60 |

Not Fused—Quick Break

| Amps. | Pole | Single Throw—No Fuse | Double Throw—No Fuse |
|-------|------|----------------------|----------------------|
| 30 | 2 | 250 DC 3022N \$ 5.00 | 3022DN \$ 10.80 |
| 30 | 3 | 250 DC 3032N 6.30 | 3032DN 12.45 |
| 30 | 2 | 500 AC 3025N 8.65 | 3025DN 13.15 |
| 30 | 3 | 500 AC 3035N 8.10 | 3035DN 16.60 |
| 60 | 2 | 250-500 6025N 8.10 | 6025DN 13.15 |
| 60 | 3 | 250-500 6035N 8.55 | 6035DN 16.60 |
| 100 | 2 | 250-500 10025N 11.50 | 10025DN 24.90 |
| 100 | 3 | 250-500 10035N 11.25 | 10035DN 30.70 |
| 200 | 2 | 250-500 20025N 17.00 | 20025DN 34.85 |
| 200 | 3 | 250-500 20035N 20.75 | 20035DN 50.60 |
| 400 | 2 | 250-500 40025N 49.80 | 40025DN 99.60 |
| 400 | 3 | 250-500 40035N 58.00 | 40035DN 132.80 |
| 600 | 2 | 250-500 60025N 83.00 | 60025DN 141.00 |
| 600 | 3 | 250-500 60035N 99.60 | 60035DN 163.50 |

S-SUNDRIES

STEEL WOOD SCREWS

Flat Head

| Length | Number Per Dozen | Up To 4 | No. 5 | No. 6 | No. 7 | No. 8 |
|--------|------------------|---------|-------|-------|-------|-------|
| 1 1/4" | " | \$.05 | \$.05 | \$.05 | \$.05 | \$.05 |
| 1 1/2" | " | ".05 | ".05 | ".05 | ".05 | ".05 |
| 1 3/4" | " | ".05 | ".05 | ".05 | ".05 | ".05 |
| 2" | " | ".05 | ".05 | ".05 | ".05 | ".05 |
| 2 1/4" | " | ".05 | ".05 | ".05 | ".05 | ".05 |
| 2 1/2" | " | ".05 | ".05 | ".05 | ".05 | ".05 |
| 2 3/4" | " | ".05 | ".05 | ".05 | ".05 | ".05 |
| 3" | " | ".05 | ".05 | ".05 | ".05 | ".05 |
| 3 1/4" | " | ".05 | ".05 | ".05 | ".05 | ".05 |
| 3 1/2" | " | ".05 | ".05 | ".05 | ".05 | ".05 |
| 3 3/4" | " | ".05 | ".05 | ".05 | ".05 | ".05 |
| 4" | " | ".05 | ".05 | ".05 | ".05 | ".05 |

STEEL WOOD SCREWS—Continued

| Length | Number Per Dozen | No. 9 | No. 10 | No. 12 | No. 14 | No. 16 |
|--------|------------------|-------|--------|--------|--------|--------|
| 1 1/4" | " | \$.05 | \$.05 | \$.05 | \$.05 | \$.05 |
| 1 1/2" | " | ".05 | ".05 | ".05 | \$.06 | \$.07 |
| 1 3/4" | " | ".05 | ".05 | ".05 | \$.06 | \$.07 |
| 2" | " | ".05 | ".05 | ".05 | \$.06 | \$.08 |
| 2 1/4" | " | ".05 | ".05 | ".05 | \$.06 | \$.08 |
| 2 1/2" | " | ".05 | ".05 | ".05 | \$.06 | \$.08 |
| 2 3/4" | " | ".05 | ".05 | ".05 | \$.06 | \$.08 |
| 3" | " | ".05 | ".05 | ".05 | \$.06 | \$.08 |
| 3 1/4" | " | ".05 | ".05 | ".05 | \$.06 | \$.08 |
| 3 1/2" | " | ".05 | ".05 | ".05 | \$.06 | \$.08 |
| 3 3/4" | " | ".05 | ".05 | ".05 | \$.06 | \$.08 |
| 4" | " | ".05 | ".05 | ".05 | \$.06 | \$.08 |

BRASS SCREWS

Round, Flat or Oval Head

| Length | Number Per Dozen | Up to 4 | No. 5 | No. 6 | No. 8 | No. 9 |
|--------|------------------|---------|-------|-------|-------|-------|
| 1 1/4" | " | \$.06 | \$.06 | \$.07 | \$.08 | \$.10 |
| 1 1/2" | " | ".06 | ".07 | ".08 | \$.08 | \$.10 |
| 1 3/4" | " | ".07 | ".07 | ".08 | \$.08 | \$.11 |
| 2" | " | ".07 | ".08 | ".09 | \$.11 | \$.12 |
| 2 1/4" | " | ".08 | ".08 | ".11 | \$.13 | \$.15 |
| 2 1/2" | " | ".08 | ".08 | ".14 | \$.15 | \$.17 |
| 2 3/4" | " | ".08 | ".08 | ".20 | \$.20 | \$.23 |
| 3" | " | ".08 | ".08 | ".20 | \$.20 | \$.23 |

| Length | Number Per Dozen | No. 10 | No. 12 | No. 14 | No. 16 | No. 18 |
|--------|------------------|--------|--------|--------|--------|--------|
| 1 1/4" | " | \$.11 | \$.11 | \$.11 | \$.11 | \$.11 |
| 1 1/2" | " | \$.12 | \$.14 | \$.14 | \$.14 | \$.14 |
| 1 3/4" | " | \$.15 | \$.15 | \$.22 | \$.22 | \$.22 |
| 2" | " | \$.16 | \$.20 | \$.24 | \$.24 | \$.24 |
| 2 1/4" | " | \$.20 | \$.25 | \$.32 | \$.32 | \$.32 |
| 2 1/2" | " | \$.26 | \$.30 | \$.40 | \$.40 | \$.40 |
| 2 3/4" | " | \$.30 | \$.35 | \$.45 | \$.45 | \$.45 |
| 3" | " | \$.33 | \$.40 | \$.50 | \$.50 | \$.50 |
| 3 1/4" | " | \$.45 | \$.60 | \$.70 | \$.70 | \$.70 |

For Gross Lots Multiply dozen price 7 times.

LAG SCREWS

| Length | 3" | 3 1/4" | 4" | 4 1/4" | 5" | 6" |
|-----------------|-------|--------|-------|--------|-------|-------|
| 1/4" Price Each | \$.05 | \$.05 | \$.05 | \$.05 | \$.05 | \$.10 |
| 1/2" Price Each | \$.05 | \$.05 | \$.07 | \$.08 | \$.09 | \$.10 |

STRAPS—CLIPS OR CLAMPS

Without Screws, For Pipe

| Tinned Straps 2 Hole Price Each | 1/4" | 1/2" | 3/4" | 1" | 1 1/4" |
|--------------------------------------|-------|-------|-------|-------|-----------|
| Light Steel Straps-1 Hole Price Each | \$.01 | \$.01 | \$.01 | \$.01 | \$.01 1/4 |
| Mall. Iron Straps-1 Hole Price Each | \$.03 | \$.03 | \$.05 | \$.07 | \$.08 |
| P & S Conduit Clips With Bolts | \$.07 | \$.08 | \$.10 | \$.10 | \$.15 |
| Tinned Straps 2 Hole Price Each | \$.02 | \$.02 | \$.03 | \$.04 | \$.05 |
| Light Steel Straps-1 Hole Price Each | \$.10 | \$.15 | \$.30 | \$.45 | \$.55 |
| Mall. Iron Straps-1 Hole Price Each | \$.25 | \$.45 | \$.70 | \$.85 | \$.95 |
| P & S Conduit Clips With Bolts | \$.26 | \$.26 | \$.26 | \$.26 | \$.26 |

SOLDER

| 40-60 Bar or Wire | 50-50 Bar or Wire | Resin Core | Ribbon | Allen Alumi-Flex |
|-------------------|-------------------|------------|---------|------------------|
| Per Pound..... | \$.70 | \$.85 | \$ 1.15 | \$.80 |
| Per Ounce..... | .10 | .10 | .15 | .10 |

SOLDER PASTE

| Make | 2 oz. Cans | 2 oz. Tubes | 4 oz. Cans | Half Pound Cans | One Pound Cans |
|----------|------------|-------------|------------|-----------------|----------------|
| Allen | \$.30 | \$.40 | \$.55 | \$.90 | \$1.50 |
| Burnley | .20 | .30 | .40 | .70 | 1.00 |
| Crescent | .25 | .35 | .55 | .85 | 1.00 |
| G. E. | .20 | .30 | .40 | .70 | 1.00 |
| Highland | .30 | .40 | .50 | .80 | 1.00 |
| Nokorode | .20 | .30 | .40 | .70 | 1.00 |

SOLDERING SALTS

| | | ½ Lb | 1 Lb. |
|-----------------|-----------------|-------|--------|
| Burnley | In cans each | \$.65 | \$1.00 |
| Esco | " " " | .80 | 1.60 |
| Yeager | " " " | .65 | 1.00 |
| McGill Crescent | | .75 | 1.00 |
| Nokorode | In cans each | .85 | |
| Allen | In Bottles each | .75 | 1.00 |

SOLDER STICKS

| GOLDEN STOPS | | Price |
|---------------|--|-------|
| Burnley..... | | \$.20 |
| Esco..... | | .25 |
| Samson..... | | .30 |
| Allen..... | | .40 |
| Crescent..... | | .25 |
| GE..... | | .25 |

FIXTURE STUDS

| FIXTURE STUDS | | |
|--|---------------|---------------|
| | $\frac{3}{4}$ | $\frac{1}{2}$ |
| Four Prong Fixture Studs Less Bolts..... | \$.10 | \$.15 |
| Bolts Extra..... | .01 | .01 |
| No Bolt Fixture Studs..... | .10 | .15 |

STAPLES

| | |
|------------------------------------|-------|
| Staples Insulated Nails Per Dozen | \$.05 |
| Leather Nail Heads Per Dozen | .05 |
| Milonite Insulated Nails Per Dozen | .05 |

PL-28

Tape

TAPE

| FRICTION TAPE | | Per Pound | Per Half Pound | Per 2 Ounce | Per 1 Ounce | Per Foot |
|-------------------------|--|-----------|----------------|-------------|-------------|----------|
| Amazon Friction | | \$.65 | \$.35 | \$.10 | \$.05 | \$.01 |
| Adhere | | .65 | .35 | .10 | .05 | .01 |
| Bulldog | | .70 | .40 | .10 | .05 | .01 |
| Catact | | .55 | .30 | .10 | .05 | .01 |
| Commodity | | .60 | .30 | .10 | .05 | .01 |
| Dutch Brand | | .60 | .30 | .10 | .05 | .01 |
| Everstick | | .60 | .30 | .10 | .05 | .01 |
| Eaco | | .55 | .30 | .10 | .05 | .01 |
| G. E. | | .55 | .30 | .10 | .05 | .01 |
| Graybar Railway Signal | | .90 | .45 | .15 | .05 | .02 |
| Grimshaw | | 2.00 | 1.00 | .25 | .15 | .03 |
| Holdfast | | 1.00 | .50 | .10 | .05 | .01 |
| Holdite | | .60 | .30 | .10 | .05 | .01 |
| I X L | | .75 | .40 | .10 | .05 | .01 |
| Illinois | | .55 | .30 | .10 | .05 | .01 |
| Johns Manville Armature | | 1.75 | .90 | .20 | .10 | .02 |
| " " Jomance | | 1.00 | .55 | .15 | .10 | .02 |
| " " White | | 1.35 | .70 | .20 | .10 | .02 |
| " " No. 3 Now No. 5 | | .60 | .30 | .10 | .05 | .01 |
| " " No. 6 " " 40 | | .55 | .30 | .10 | .05 | .01 |
| Jason | | .60 | .30 | .10 | .05 | .01 |
| Leader | | .70 | .35 | .10 | .05 | .01 |
| Manson | | 1.30 | .65 | .20 | .10 | .02 |
| Magnet | | .75 | .40 | .10 | .05 | .01 |
| O. K. | | .60 | .30 | .10 | .05 | .01 |
| P & B | | 1.00 | .50 | .15 | .10 | .02 |
| Peerless | | .60 | .30 | .10 | .05 | .01 |
| Service | | .90 | .45 | .15 | .10 | .02 |
| Stanpat | | .55 | .30 | .10 | .05 | .01 |
| Sticks | | .55 | .30 | .10 | .05 | .01 |
| Security | | .55 | .30 | .10 | .05 | .01 |
| Victor | | .55 | .30 | .10 | .05 | .01 |
| Vim Grav | | 1.10 | .60 | .15 | .10 | .02 |

RUBBER TAPE

| | | | | | |
|-----------------------------|--------|--------|--------|--------|--------|
| Amazon Rubber | \$1.00 | \$.50 | \$.15 | \$.10 | \$.04 |
| Alexall | 1.20 | .60 | .15 | .10 | .04 |
| Alpha | 1.10 | .50 | .15 | .10 | .04 |
| Brooklyn | .60 | .30 | .10 | .05 | .03 |
| Catact | .70 | .35 | .10 | .05 | .03 |
| Dutch Brand | .70 | .35 | .10 | .05 | .03 |
| Eleco | .60 | .30 | .10 | .05 | .03 |
| G. E. | .60 | .30 | .10 | .05 | .03 |
| Graybar Victor | .60 | .30 | .10 | .05 | .03 |
| Holdfast | 1.00 | .50 | .15 | .10 | .04 |
| Imperial | .60 | .30 | .10 | .05 | .03 |
| Illinois | .60 | .30 | .10 | .05 | .03 |
| Okonite | 1.65 | .85 | .20 | .10 | .04 |
| Para | .75 | .40 | .10 | .05 | .03 |
| Pittsburgh | .60 | .30 | .10 | .05 | .03 |
| Relio | .60 | .30 | .10 | .05 | .03 |
| Security | .55 | .30 | .10 | .05 | .03 |
| U. S. Rubber | .65 | .35 | .10 | .05 | .03 |
| Twin Tape Rubber & Friction | .75 | .40 | .10 | .05 | .03 |
| USCO Westinghouse | .90 | .50 | .15 | .10 | .04 |

COUCH TELEPHONES

VESTIBULE TYPE

| | |
|---|---------|
| No. 74 Armored Cord Receiver Type | \$25.00 |
| No. 74A Swing Arm Receiver Type | 37.30 |
| No. 74C Cordless Loud Speaker Type | 30.75 |
| Above prices are for telephones complete but do not include for any call buttons. | |
| Add for buttons—Janitor Calling Buttons if fitted | \$.95 |
| Add for Each Suite Calling Button | .95 |

SUITE TELEPHONES

| | |
|-----------------------------------|---|
| Series 2809 to 2849 or 1909 to 49 | Page 22 Bulletin No. 89 S. H. Couch Co. |
| Number of Buttons | 0 1 2 3 4 |
| Price Ea. Surface or Flush | \$11.40 \$11.40 \$12.45 \$13.60 \$14.60 |

TELEPHONE CABLES

| Number of Conductors | Braided Type "B" | Lead Covered Type "L" |
|----------------------|------------------|-----------------------|
| 8 | B-8 | L-8 |
| 12 | B-12 | L-12 |
| 16 | B-16 | L-16 |
| 21 | B-21 | L-21 |
| 25 | B-25 | L-25 |
| 31 | B-31 | L-31 |
| 37 | B-37 | L-37 |

TIME SWITCHES

BUCKEYE TIME SWITCHES

| 110 or 220 V. Sgl. or Dble Pole-10 A. | Without Term. Box | With Term. Box |
|--|-------------------|----------------|
| \$19.50 | \$28.00 | |
| " " " " " 20 A. | 23.00 | 30.00 |
| " " " " " 30 A. | 26.00 | 32.00 |
| " " " " " 50 A. | 30.00 | 36.00 |
| Specials | 26.00 | 30.00 |
| Buckeye Combination Time Switch Remote Control Unit Complete | | |
| AC Capacity up to 125A-110 or 220 Volt-2 & 3 Wire | \$ 70.00 | |
| DC | 125.00 | |

HARTFORD TIME SWITCHES

| Type B Single or Double Pole. | 10 Amp. | 20 Amp. | 35 Amp. | 50 Amp. |
|-------------------------------------|---------|---------|---------|---------|
| \$36.00 | \$39.00 | \$42.00 | \$50.00 | |
| Type B Triple Pole. | 34.00 | 41.00 | 45.00 | |
| Type C & D Single or Double Pole. | 39.00 | 42.00 | 47.00 | 52.00 |
| Type C & D Triple Pole. | 41.00 | 45.00 | 49.00 | |
| Type G Apt. Hall Light Control D.P. | 38.00 | | 60.00 | |

PARAGON TIME SWITCHES

| Indoor | All 250 Volt | Outdoor |
|-----------------------------------|---------------------|---------------|
| No. 1—\$47.00 | 30 Amp. Double Pole | No. 2—\$47.00 |
| No. 1—59.00 | 50 " " " | No. 2—59.00 |
| No. 1—59.00 | 30 " Triple " | No. 2—59.00 |
| No. 3—45.00 | 20 " Double " | No. 4—45.00 |
| No. 3—40.00 | 10 " " " | No. 4—40.00 |
| No. 3—45.00 | 10 " Triple " | No. 4—45.00 |
| Sunday Shut Off—Extra | | \$5.00 |
| Attachment for Turning on earlier | | 5.00 |

RELIANCE & RACINE SWITCHES

| | 10 Amp. | 20 Amp. | 30 Amp. | 50 Amp. |
|------------------------------|---------|---------|---------|---------|
| Racine Type 1R-2R | \$19.50 | \$23.00 | | |
| Reliance Type 10-20-30-50 | 28.00 | 30.00 | \$32.00 | \$36.00 |
| Reliance Type 15 Triple Pole | | 32.00 | | |

SAUTER TIME SWITCHES

| No. | Amps. | Poles | Description | Price |
|-----|-------|-------|--|----------|
| 101 | 2 | 1 | Clock operated, key wound 40 day clocks | \$ 52.00 |
| 111 | 10 | 1 | " " " 40 " " | 56.00 |
| 121 | 15 | 2 | " " " 40 " " | 60.00 |
| 201 | 2 | 1 | Self winding | 74.00 |
| 211 | 10 | 1 | " " " " | 80.00 |
| 221 | 10 | 2 | " " " " | 85.00 |
| 321 | 25 | 2 | Motor operated self winding clocks | 105.00 |
| 341 | 40 | 2 | " " " " | 110.00 |
| 401 | 100 | 2 | Motor operated Oil Break self winding clocks | 190.00 |
| 431 | 200 | 2 | " " " " | 250.00 |
| 461 | 300 | 2 | " " " " | 280.00 |

TORK TIME SWITCHES OR CLOCKS

| Single Pole | Description | Indoor | Outdoor | Switchboard |
|---|-------------|-----------------|---------------|---------------|
| 15 Amp. 125 Volt | | \$115—\$20.00 | \$215—\$25.00 | \$415—\$19.00 |
| Double " 30 " 250 " | | \$130—25.00 | \$230—30.00 | |
| Single " Double Throw | | \$166—25.00 | | |
| Double " Momentary Contact | | \$111—25.00 | | |
| Dble. Pole 30 A. 250 V. Windless | | \$730—60.00 | \$830—65.00 | \$930—58.00 |
| Combination Type—with Clock and Contactor | | | | |
| For AC Only | | Description | For DC Only | |
| No. 76062 | \$50.00 | 60 Amps. 2 Pole | No. 75062 | \$ 70.00 |
| No. 76102 | 75.00 | 100 " 2 Pole | No. 75102 | 125.00 |

ZENITH TIME SWITCHES

| Amp. Volts Pole | Closed Face | Open Face | Open Flush | Mount |
|-----------------|-------------|-----------|------------|---------|
| 10 110 Sgl. | T-810 | 28.00 | 115-MC | \$30.00 |
| 10 220 Sgl. | 110-MC | 28.00 | 125-MC | \$34.00 |
| 20 110 Sgl. | 1101 | 20.00 | 1151 | 22.00 |
| 20 220 Dbl. | 110-ABCG | 26.00 | 115-ABCG | 28.00 |
| 20 220 Dbl. | 1102 | 23.00 | 1152 | 25.00 |
| 20 220 Dbl. | 110-B&G2 | 30.00 | 115-B&G2 | 32.00 |
| 20 220 Tri. | 11023 | 28.00 | 11523 | 30.00 |
| 30 220 Dbl. | 1103 | 25.00 | 1153 | 27.00 |

TRANSFORMERS

BELL & TOY TRANSFORMERS

| Name | Style | Watt | Secondary | 50 to 133 | 25 to 40 |
|----------|-----------------|----------|-----------|----------------|----------------|
| | Steel Clad Bell | 25 | Single | No. 86 \$ 1.30 | No. 86 \$ 1.50 |
| | " " " 25 | Three | 86T | 1.60 | 86T 1.80 |
| | Porcelain Bell | 25 | Single | 87 1.60 | 87 1.80 |
| | Out. Box Bell | 25 | Single | 86ER 1.60 | 86ER 1.80 |
| ED-WARDS | Heavy Duty | 50 | 8-16-24 | 88 4.30 | 88 4.80 |
| | " " 75 | " | " | 89 6.40 | 89 7.10 |
| | " " 100 | " | " | 90 7.50 | 90 8.30 |
| | Toy | 50 | 3 to 18 | 870 3.60 | 870 4.30 |
| | " " 75 | 3 to 24 | " | 871 5.95 | 871 7.15 |
| | " " 100 | 2 to 20 | " | 872 8.95 | 872 10.75 |
| G. E. | Bell Residence | 12 Volt | 2332 | 1.30 | 192340 1.50 |
| | Box Type | 12 | 2488 | 1.45 | 2490 1.70 |
| | Heavy Duty | 50 | 8-16-24 | 2333 5.10 | 2339 7.10 |
| | " " 100 | 10-20-30 | 2334 8.25 | 2340 11.20 | |

| | | | | |
|------------|--------------------|--------------|---------------|---------------|
| HEMCO | Mold. Single | 25 10 Volts | 221 1.35 | |
| | Mold. 3 Circuit | 25 6 to 18V. | 222 1.55 | |
| | Steel Sgl. Cir. | 25 10 Volts | 225 1.25 | 235 1.35 |
| | Box Type 3 Cir. | 25 6 to 18V. | 226 1.35 | |
| | Box Type Sgl. Cir. | 25 10 Volts | 227 1.35 | 237 1.50 |
| | Box Type 3 Cir. | 25 6 to 18V. | 228 1.55 | |
| Wizard | 25 10 Volt | 230-101 | 1.30 | 230-102 1.50 |
| Nucode | 25 10 Volt | 230-111 | 1.45 | 230-112 1.65 |
| Tri-Volt | 25 6 to 18V. | 230-121 | 1.45 | 230-122 1.65 |
| Porcelain | 230-131 | 1.45 | | |
| JEFF-ERSON | Little Jeff Toy | 50 5 1/2-13 | 535-101 3.95 | 535-102 5.00 |
| | Midget Toy | 75 5 1/2-22 | 535-121 4.75 | 535-122 6.05 |
| | Model 2 Toy | 100 5 1/2-23 | 535-131 7.15 | 535-132 9.10 |
| | Model 3 Toy | 150 1-30 | 535-141 9.00 | |
| | Heavy Duty A | 50 6 to 20 | 231-101 5.15 | 231-102 7.30 |
| | " " B | 75 6 to 20 | 231-111 7.70 | 231-112 10.20 |
| | " " C | 125 6 to 24 | 231-121 10.25 | 231-122 12.95 |
| | " " E | 250 6 to 24 | 231-141 20.80 | 231-142 25.65 |

| | | | | |
|-------------|----------------|--------------|-------------|-------------|
| KILLARK | Blue Bell | 10 8 Volt | 6166 1.25 | |
| | Tri-Volt | 20 6 to 16 | 6163 1.45 | 6126 1.40 |
| | Box Type | 10 8 Volt | 7166 1.45 | |
| | Porcelain Case | 10 8 Volt | 4166 1.45 | |
| RITTENHOUSE | Greyhound | 25 8 Volt | L-160 1.30 | L-125 1.50 |
| | Type A | 25 8 Volt | A-160 1.40 | A-125 1.60 |
| | Tri-Volt | 25 6-8-14 V. | A-1360 1.55 | A-1325 1.80 |
| | Porcelain | 25 8 Volt | AP-160 1.45 | AP-125 1.65 |
| | Box Type | 25 8 Volt | OB-160 1.45 | OB-125 1.65 |
| | Toy Junior | 50 | 50 3.30 | 50 4.00 |
| | " Genesee | 75 | 75 4.95 | 75 6.00 |
| | " Senior | 100 | 100 6.60 | 100 8.00 |
| | " Niagara | 150 | 150 8.80 | 150 10.60 |

| | | | | |
|----------|----------------|-----|-------------|--|
| STANLEY | S-1 Sgle. Volt | 15 | S-1 1.30 | |
| | S-3 3 Volt | 15 | S-3 1.40 | |
| | D-1 Sgle. Volt | 25 | D-1 1.50 | |
| | D-3 3 Volt | 25 | D-3 1.70 | |
| PATERSON | HD-1 3 Volt | 50 | HD-1 6.65 | |
| | EHD 3 | 100 | EHD-1 18.00 | |
| | " 3 | 200 | | |
| | " 3 | 300 | | |

NOTE: For 220 Volt Transformers add 20% to above prices.

Wires

Wires

WIRES

RUBBER COVERED WIRES

Special Price on No. 14 S.B. Wire

| | | Price Per Foot | | Per Foot |
|-----------------------------|--------|----------------|--------|-----------|
| | | No. 18 | No. 16 | No. 14 |
| In less than Coil Lots..... | | | | \$.01½ |
| In Coil Lots..... | | | | .01½ |
| Other Sizes | | | | |
| Fixture Wire Light..... | | \$.01 | \$.01½ | |
| " " Heavy..... | | .01½ | .01½ | |
| Solid Single Braid..... | | .01½ | .01½ | See Above |
| " Double "..... | | .01½ | .01½ | \$.02 |
| Stranded Sgle. Braid..... | | .01½ | .01½ | .02 |
| " Dble. "..... | | | | .02½ |
| Duplex Single Braid..... | | | | .04½ |
| " Double "..... | | | | .05½ |
| Other Sizes | | | | |
| Fixture Wire Light..... | No. 12 | No. 10 | No. 8 | No. 6 |
| " " Heavy..... | | | | |
| Solid Single Braid..... | \$.02½ | \$.03½ | .05 | \$.07½ |
| " Double "..... | .02½ | .03½ | .05 | .08 |
| Stranded Sgle. Braid..... | .03 | .04 | .05½ | .08 |
| " Dble. "..... | .03½ | .04½ | .06 | .08½ |
| Duplex Single Braid..... | .06 | .07 | .08½ | |
| " Double "..... | .06½ | .08½ | .09½ | |

LARGER SIZES DOUBLE BRAID STRANDED

| Size | Price Per Foot | Size | Price Per Foot |
|-----------------|----------------|-----------------|----------------|
| No. 8 D. B..... | \$.06 | No. 1 D. B..... | \$.21 |
| No. 6 D. B..... | .08½ | No. 0..... | .25 |
| No. 4 D. B..... | .11 | No. 00..... | .30 |
| No. 3 D. B..... | .13 | No. 000..... | .36½ |
| No. 2 D. B..... | .15 | No. 0000..... | .44½ |

CIRCULAR MILL CABLE

| Size | Price Per Foot | Size | Price Per Foot |
|-------------------|----------------|---------------------|----------------|
| 250,000 C. M..... | \$.53 | 600,000 C. M..... | \$1.21 |
| 300,000 C. M..... | .63 | 700,000 C. M..... | 1.40 |
| 350,000 C. M..... | .72 | 750,000 C. M..... | 1.48 |
| 400,000 C. M..... | .81 | 800,000 C. M..... | 1.60 |
| 450,000 C. M..... | .93 | 900,000 C. M..... | 1.78 |
| 500,000 C. M..... | 1.00 | 1,000,000 C. M..... | 1.95 |

WEATHERPROOF WIRE

Triple Braid

| | No. 18 | No. 16 | No. 14 | No. 12 | No. 10 | No. 8 | No. 6 |
|----------------------------|--------|--------|--------|--------|--------|-------|-------|
| Per Pound Solid..... | \$.04 | \$.60 | \$.58 | \$.56 | \$.51 | \$.48 | \$.46 |
| " " Stranded..... | | | | .59 | .53 | .50 | |
| Per Foot Solid..... | .01 | .01½ | .02 | .02½ | .03 | .04 | |
| " " Stranded..... | .01½ | .01½ | .02½ | .03 | .03½ | .04½ | |
| Number Feet Per Pound..... | 90 | 70 | 40 | 30 | 20 | 13 | |

EXTRAS—For slow burning W. P. Wire—Per Pound Extra..... \$.01
 For Twisted Pair W. P. Wire—Per Pound Extra..... .02
 For Double Braid W. P. Wire—Per Pound Extra..... .01
 For Medium Hard Drawn—Per Pound Extra..... .00½
 For Armored Cables See Page PL-9.

ANNUNCIATOR—TELEPHONE WIRE, ETC.

| Description | | No. 18 | No. 16 |
|--------------|--------------|--------|--------|
| Fixture Wire | Solid | \$.01 | \$.01½ |
| " " " | Light 1/4 | | .01½ |
| " " " | Heavy 1/2 | | .01½ |
| " " " | Stranded 1/4 | .01½ | .01½ |
| " " " | Heavy 1/2 | .01½ | .01½ |

| Description | | No. 18 | No. 16 | No. 14 | No. 12 |
|-------------------|----------------|--------|--------|--------|--------|
| Single | Per Pound..... | .68 | .66 | \$.63 | |
| " " " | Per Foot..... | .00½ | .00½ | .01 | |
| Twisted or Duplex | Per Pound..... | .70 | .68 | .66 | |
| " " " | Per Foot..... | .01 | .01½ | .02 | |

| Description | | No. 18 | No. 16 | No. 14 | No. 12 |
|-------------------|----------------|--------|--------|--------|--------|
| Single | Per Pound..... | .86 | .81 | .79 | |
| " " " | Per Foot..... | .01 | .01½ | .01½ | |
| Twisted or Duplex | Per Pound..... | .89 | .83 | .81 | |
| " " " | Per Foot..... | .02 | .02½ | .03 | |

| Description | | No. 18 | No. 16 | No. 14 | No. 12 |
|--|--|--------|--------|--------|--------|
| Single Stranded Black Per Foot..... | | .03 | .03½ | \$.04 | \$.05 |
| Single Stranded Colored Per Foot..... | | .04 | .04 | .05 | .06 |
| Single Glazed Cotton Per Foot..... | | .04 | .04 | .05 | .07 |
| Single Artificial Silk Per Foot..... | | .04½ | .05 | .05½ | .08 |
| Duplex Glazed Cotton Per Foot..... | | .08 | .09 | .10 | |
| Duplex Artificial Silk Per Foot..... | | .09 | .10 | .11 | |
| Twisted Pair Glazed Cotton Per Foot..... | | .08 | .09 | .10 | |
| Twisted Pair Artificial Silk Per Foot..... | | .09 | .10 | .11 | |

| Description | | No. 18 | No. 16 | No. 14 | No. 12 |
|--|--|--------|--------|--------|--------|
| Asbestos Range Wire or Switch Board Wire | | | | | |
| Per Foot..... | | \$.10 | \$.12 | .13 | .15 |

COVERED TELEPHONE WIRES

| | No. 22 | No. 20 | No. 19 | No. 18 | No. 17 | No. 16 | No. 14 |
|------------------------------|--------|--------|--------|--------|--------|--------|--------|
| Inside Ph'ne Wire Per Ft.... | \$.03 | \$.03 | \$.03 | \$.04 | \$.04 | \$.05 | \$.06 |
| Outside " " " " " " " " | .03 | .03 | .03 | .03½ | .03½ | .04 | .05 |

GALVANIZED TELEPHONE WIRE

| Size BWG | No. 4 | No. 6 | No. 8 | No. 10 | No. 12 | No. 14 |
|------------------------------|-------|-------|-------|--------|--------|--------|
| EBB Extra Best Per Pound.... | \$.13 | \$.13 | \$.13 | \$.13 | \$.14 | \$.15 |
| B. B. Best Best " " " " | .12 | .12 | .12 | .12 | .13 | .14 |
| Steel " " " " " " " " | .11 | .11 | .11 | .11 | .12 | .13 |
| Weight Per 1000 Feet..... | 153 | 112 | 74 | 49 | 32 | 19 |
| Weight Per Mile..... | 811 | 590 | 390 | 258 | 170 | 99 |

WIRE, MAGNET

Price Per Pound

| Size | Single Cotton | Double Cotton | Single Silk | Double Silk | Plain Enamel-ed Cotton | Enamel-ed Single Cotton | Enamel-ed Double Cotton |
|------|---------------|---------------|-------------|-------------|------------------------|-------------------------|-------------------------|
| 8 | \$.95 | \$1.00 | | | \$.95 | \$1.00 | \$1.05 |
| 10 | .98 | 1.02 | | | .97 | 1.04 | 1.07 |
| 12 | 1.00 | 1.05 | | | 1.00 | 1.06 | 1.09 |
| 14 | 1.05 | 1.10 | | | 1.02 | 1.08 | 1.12 |
| 16 | 1.07 | 1.12 | | | 1.05 | 1.10 | 1.20 |
| 18 | 1.09 | 1.15 | \$1.45 | \$1.60 | 1.08 | 1.15 | 1.30 |
| 20 | 1.15 | 1.25 | 1.50 | 1.80 | 1.10 | 1.30 | 1.35 |
| 22 | 1.25 | 1.35 | 1.80 | 2.20 | 1.12 | 1.35 | 1.45 |
| 24 | 1.35 | 1.50 | 1.90 | 2.40 | 1.15 | 1.45 | 1.60 |
| 26 | 1.45 | 1.70 | 2.05 | 2.50 | 1.27 | 1.70 | 1.90 |
| 28 | 1.70 | 2.05 | 2.30 | 3.05 | 1.40 | 1.95 | 2.25 |
| 30 | 1.95 | 2.35 | 2.95 | 3.95 | 1.50 | 2.20 | 2.50 |
| 32 | 2.35 | 2.95 | 3.70 | 5.50 | 1.70 | 2.85 | 3.50 |
| 34 | 2.95 | 3.65 | 4.85 | 7.30 | 1.80 | 3.65 | 4.70 |
| 36 | 3.70 | 5.05 | 6.50 | 9.30 | 2.25 | 5.00 | 5.80 |
| 38 | 5.95 | 8.50 | 9.70 | 16.00 | | | |
| 40 | 8.65 | 12.95 | 15.60 | 22.40 | | | |

NOTE: For odd sizes use half the increase of next larger size.
 For ¼ lb. lots use one third of above prices.
 For one ounce lots use one tenth of above prices.

Price Per 100 Feet

| Size | Single Cotton | Double Cotton | Single Silk | Double Silk | Enamel-ed Single Cotton | Enamel-ed Double Cotton |
|------|---------------|---------------|-------------|-------------|-------------------------|-------------------------|
| 8 | \$5.00 | \$5.25 | | | \$4.70 | \$5.25 |
| 10 | 3.00 | 3.15 | | | 2.75 | 3.15 |
| 12 | 2.00 | 2.15 | | | 1.80 | 2.15 |
| 14 | 1.80 | 2.00 | | | 1.70 | 2.00 |
| 16 | 1.00 | 1.05 | \$1.20 | \$1.30 | .95 | 1.05 |
| 18 | .65 | .70 | .75 | .90 | .55 | .70 |
| 20 | .50 | .55 | .60 | .70 | .45 | .55 |
| 22 | .35 | .40 | .45 | .50 | .30 | .40 |
| 24 | .25 | .30 | .35 | .40 | .20 | .30 |
| 26 | .15 | .17 | .20 | .25 | .13 | .17 |
| 28 | .10 | .15 | .15 | .20 | .10 | .15 |
| 30 | .10 | .12 | .12 | .15 | .10 | .12 |
| 32 | .10 | .12 | .12 | .14 | .10 | .12 |
| 34 | .10 | .12 | .12 | .14 | .10 | .12 |
| 36 | .10 | .12 | .12 | .14 | .10 | .12 |
| 38 | .10 | .12 | .12 | .14 | .10 | .12 |
| 40 | .10 | .12 | .12 | .14 | .10 | .12 |

Note: Prices per 100 feet are higher than per pound rate to cover cost of measuring and should be used only for small lot sales.

LEAD & RUBBER COVERED WIRE AND CABLE

| Size | Conductor Solid | Conductor Stranded | Size | Conductor Solid | Conductor Stranded |
|---------|-----------------|--------------------|----------------|-----------------|--------------------|
| No. 14 | Price Per Foot | \$.05 | 250,000 C. M. | Cable | \$.78 |
| No. 12 | " " " | .06 | 300,000 C. M. | " " | .88 |
| No. 10 | " " " | .08½ | 350,000 C. M. | " " | .99 |
| No. 8 | " " " | .10 | 400,000 C. M. | " " | 1.08 |
| No. 6 | " " " | .17 | 500,000 C. M. | " " | 1.28 |
| No. 4 | " " " | .22 | 600,000 C. M. | " " | 1.58 |
| No. 3 | " " " | .25 | 700,000 C. M. | " " | 1.77 |
| No. 2 | " " " | .30 | 750,000 C. M. | " " | 1.89 |
| No. 1 | " " " | .36 | 800,000 C. M. | " " | 2.00 |
| No. 1/0 | " " " | .42 | 900,000 C. M. | " " | 2.20 |
| No. 2/0 | " " " | .47 | 1000,000 C. M. | " " | 2.35 |
| No. 3/0 | " " " | .54 | | | |
| No. 4/0 | " " " | .63 | | | |

NOTE: Above prices are based on following quantities
 No. 16 to No. 8 Less than 100 ft.
 No. 6 and larger less than 50 ft.

| Size | Duplex Solid | Duplex Stranded | Three (3) Conductor Solid | Three (3) Conductor Stranded |
|---------|---------------------|-----------------|---------------------------|------------------------------|
| No. 14 | Price Per Foot..... | \$.08 | \$.10 | \$.17 |
| No. 12 | " " " " " " | .12 | .14 | .22 |
| No. 10 | " " " " " " | .14½ | .16 | .27 |
| No. 8 | " " " " " " | .17½ | .20 | .33 |
| No. 6 | " " " " " " | .29 | .33 | .45 |
| No. 4 | " " " " " " | .43 | .43 | .73 |
| No. 2 | " " " " " " | .58 | .58 | .90 |
| No. 1 | " " " " " " | .72 | .72 | 1.38 |
| No. 1/0 | " " " " " " | .83 | .83 | 1.40 |
| No. 2/0 | " " " " " " | 1.00 | 1.00 | 1.60 |
| No. 3/0 | " " " " " " | 1.18 | 1.18 | 1.83 |
| No. 4/0 | " " " " " " | 1.46 | 1.46 | 2.20 |

NOTE: Above prices are based on following quantities:
 No. 16 to No. 8 Less than 100 ft.
 No. 6 and larger less than 50 ft.

STEEL TAPED PARK CABLE

600 V. only

| Size | 1 Cond. | 2 Cond. | 3 Cond. |
|---------------------|---------|---------|---------|
| No. 12 Solid..... | \$.15 | \$.26 | \$.40 |
| No. 10 " " " " | .22 | .29 | .45 |
| No. 8 " " " " | .24 | .34 | .53 |
| No. 6 Stranded..... | .33 | .46 | .63 |
| No. 4 " " " " | .40 | .56 | .87 |

NOTE: Above prices are based on quantities of 100 to 249 feet—Prices on smaller quantities are higher.
 Prices on Park Cable over 600 V. are higher.

You can get better prices if you remember what you are selling 1 1 1

NEVER forget that when your customer buys wiring he desires the longest period of trouble-free power-and-lighting service he can get. The longer the service and the lower the maintenance you can demonstrate, the more he is willing to pay.

You have good reasons for getting a fair profit when you use Cutler-Hammer "T-V" Safety Switches. Safety switches carry a big share of the responsibility of satisfying him—and C-H Standard Duty (Type "C") Switch offers the following advantages.

Quick *make*—positive contact under all circumstances — assures longer years of service and lowest maintenance. The strong spring slams the blades home no matter how timidly the operator handles the switch. A perfect contact is instantly made, arcing is reduced to a minimum . . . slow burning and fusing of contacts are eliminated. Other features are: equally speedy break, molded crack-proof base and careful workmanship throughout.

You will find the C-H case much smaller than ordinary. Yet you are not cramped for wiring space. No time is lost in installing C-H Safety Switches. Back of all these advantages, you have the prestige of the Cutler-Hammer name — which always stands for finest quality and longest years of service.

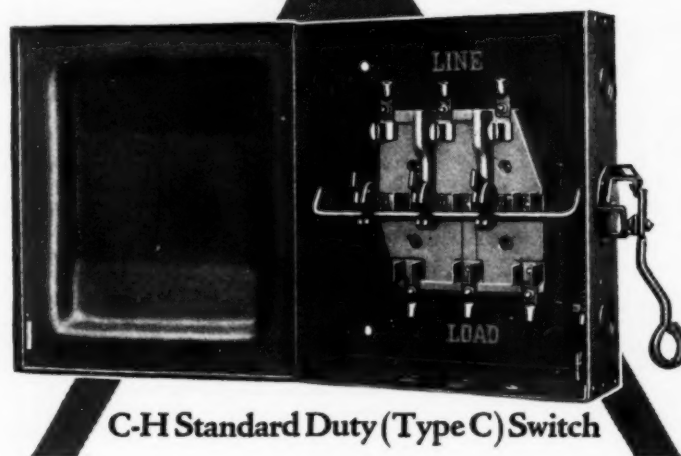
C-H Bulletin 4131 Safety Switch is made in 6 sizes from 30 to 400 amperes, 250 and 600 volts. Any reliable jobber can supply you, and a catalog will be sent at your request.

CUTLER-HAMMER, Inc.

Trumbull-Vanderpoel Elec. Mfg. Co., Inc.,
Subsidiary

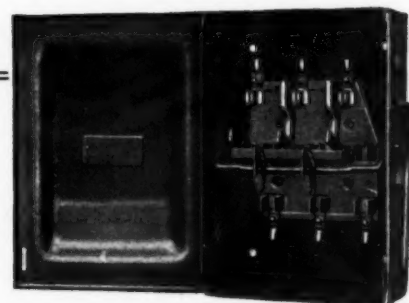
1307 St. Paul Avenue
MILWAUKEE, WIS.

Bulletin
4131



C-H Standard Duty (Type C) Switch

Bulletin
4141



Long Service in Entrance Switches
at a Low Price

The C-H Entrance Switch for lighting circuits has the same general design and construction as the C-H Type C—including molded, crack-proof base. Quick break only. 21 sizes—from 30 to 100 amperes, at 125 and 250 volts. Solid neutral, 2 or 3 wire. Low price.

CUTLER HAMMER

High Quality Safety Switches For Every Service

(9625)

Davis Urges Credit Control on Pacific Coast

Laurence W. Davis, general manager of the Association of Electragists, at a meeting in Spokane, Wash., on July 13, completed a brief visit to the Pacific Coast on behalf of the A.E.I. He spoke to meetings of contractors and jobbers held especially for him at Spokane, Seattle, Portland, San Francisco, Santa Barbara, Los Angeles and San Diego.

The growing importance of credit control was particularly emphasized by Mr. Davis in every city in which he spoke. As a thoroughly sound and economic method to regulate the contracting business Mr. Davis held that it could be put into effect in any city in which the contractors made it known definitely to their jobbers that they wanted such a plan and would support it as a matter of good business policy.

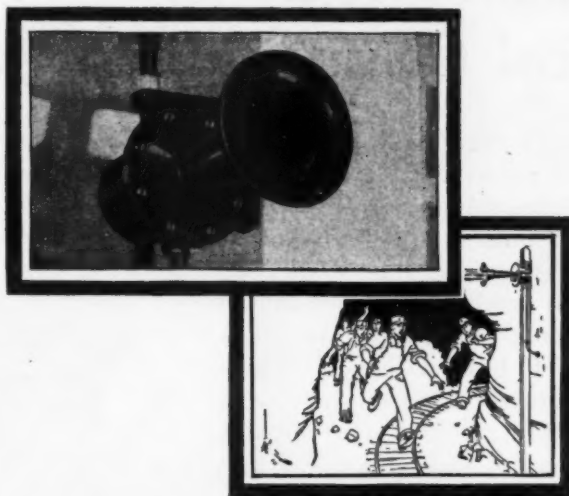
Mr. Davis, in each case, began by showing the tendencies toward consolidation and merger in all lines of business and pointed out that the most logical form of merger for such individualistic enterprises as contracting establishments, was by means of the trade association chapter. He went on to show how this particular trade association, the A.E.I., was organ-



BUYS AND SELLS CURRENT TO PROMOTE WIRING BUSINESS:

—Installing high lines all over the territory has proved a fine specialty for the Evans Electric Co., Indianapolis, Ind. Norman C. Evans, shown in his office, has found it good business to buy current at wholesale and dispense it to outlying communities, as this hastens the extension of lines and brings him a large volume of wiring and fixture business.

there is a big opportunity and a good profit in wiring for Industrial Signals



BENJAMIN Motor Driven Signals

An easy job to figure; a simple job of installation—a clean-cut profit on both the signal equipment and the wiring.

That is the story of thousands of industrial signal wiring jobs—they are everywhere and they are made to order for the electrical contractor.

An industrial signal must command instant and undivided attention. It must get an instant response. The deep, distinct, penetrating note of the Benjamin Motor Driven Signal crashes through industrial noises. It always GETS the man.

On your next industrial repair or maintenance job ask them about their signaling system.

This illustrated descriptive folder has been mailed to thousands of selected well rated industrials throughout the country.



Benjamin Electric Mfg. Co.

General Offices and Factory

DES PLAINES

(Chicago Suburb)

ILL.

NEW YORK CHICAGO SAN FRANCISCO

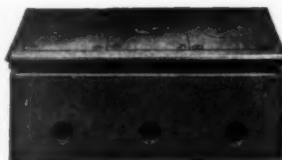
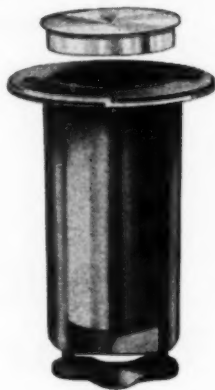
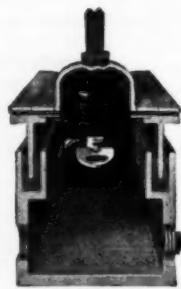
Up-to-the-Minute Fittings

Speed installation and mean more profits for Electrical Contractors

WITH the latest exclusively patented STEEL CITY fittings there are new code boxes, floor outlets and many other items that improve the quality of your work and reduce costs all along the line. Architects are specifying STEEL CITY FITTINGS because their improvement over old style methods are obvious for safety and their neatness and compactness is inspected favorably by building owners.

HIGHEST QUALITY!
And they Cost no More

STEEL CITY products are the last word in quality material that comes to the job ready for instant use. The threads are clean—no sticking to delay the work—and you can bank on the finish as specified. Write today for the new STEEL CITY catalog and sit down and estimate your next job with no wasted time or material. Let us help you on those knotty wiring problems, too. Warehouse stocks in all principal cities assure prompt deliveries.



ized to handle from headquarters a great number of problems vitally affecting every contractor's business. By way of illustration he enumerated and explained a number of the immediate problems before the association which he had brought with him to discuss with Clyde Chamblin, president of the association, at San Francisco.

The chapter organization of Electragist groups in all parts of the country, he next described. The value of a large number of well organized small groups of contractor-dealers for study and action upon matters of national policy he said, was very important and would make the association more respected and honored. Heretofore the organization has been made up of scattered members not necessarily locally organized.

The most serious local problem facing contractors, that of credit extension, could only be handled by sincere and determined local chapters, he said. He then proceeded to explain and describe the beneficial results which have accrued from controlled credit plans wherever they have been tried. He named a number of cities where such plans have been started and are going successfully.

So convincing was the evidence which Mr. Davis presented that in every city in which he spoke and many others where he only had time for a brief visit, committees were formed to take up for study jointly with the jobbing organizations of their communities the possibility of inaugurating such a plan.



FORMER INSPECTOR SUCCESSFUL FLORIDA CONTRACTOR:—Robert J. Kerr, owner of Ocoee (Fla.) Electric & Plumbing Company, and former City Electrical Inspector for Kankakee, Ill., has for the past five years been building up a successful contracting business under the name of Ocoee Electric & Plumbing Company.

STEEL CITY ELECTRIC CO.

1207 Columbus Ave.

PITTSBURGH, PA.

New England's \$4,000,000 Power Development UNION FUSE PROTECTED



New England Power Company's development which generates an electric current of 60,000 h. p. for cities and towns nearby.



The UNION-GEM
JEFFERSON Line
Is Sold Through
Wholesalers

WHEN careful consideration is given to electrical protection, Union Fuses are invariably the choice. The New England Power Company, for example, protects the circuits in its \$4,000,000 power development with Union Renewable Fuses.

Since the early days of electric power, industry has chosen Union Fuses because of their quality, dependable protection, and low maintenance cost.

Simplified design and rugged construction keep Union Renewable Fuses serviceable after repeated blowouts. The extra heavy and tough grey horn fibre case is

vented by an exclusive method. Vents, scientifically proportioned, relieve the pressure generated when the fusible element blows and prevent the molten metal being forced into end caps and threads.

In the knife-blade type, shown above, both ends of the fusible link are notched to make replacement of fuse link easy. In the ferrule type, links are bent at one end for the same reason.

For proper protection and efficiency of motor-driven equipment, lighting and power circuits—and lower fuse costs per year—specify Unions. There is a type and size for every need.

A Great Convenience

The fuse chart is a necessary guide to the proper selection of fuses. It enables you to tell the proper size at a glance, for the adequate protection of motors, and the new Catalog No. 33 explains why Union Fuses give long life and dependable protection. Write for copies of both.

Jefferson Electric Company

1503 WEST 15th STREET
Chicago, Ill.

UNION FUSES

Because they are worth more they really cost less

(8903)

WADSWORTH

yes we have it

Put your wiring problems up to Wadsworth. Safety meter service and safety industrial type switches for every purpose. Unrivaled quality and service that make your work profitable. Designed by a practical electrician. Wadsworth safety switches eliminate the disagreeable work and simplify your installation. On your next job be sure you figure on using WADSWORTH. Send for catalog describing a n d illustrating the complete line of Wadsworth Safety Electrical Switches.

No. 1843
60 Amp. Accessible Fuse Meter Test Type.

No. 1423
30 Amp. Accessible Fuse Meter Test Type.

No. 352
Channel Banking Type with 2 Branch Circuits.

No. 1769
Accessible Fuse Industrial Type.

No. 2863
Industrial Type.

No. 238
Meter Service Switch with 2 Branch Circuits.

No. 1451T
Accessible Fuse Channel Banking Type.

meter service and industrial type switches

The WADSWORTH ELECTRIC MFG CO. INC.

Corington, Kentucky.



FURNISHES AIRPORT LIGHTS FOR BEACH:—Leo Heyman, secretary, and Harry Heyman, vice-president of the Standard Gas and Electric Supply Co., Springfield, Mass., supporting one of the Crouse-Hinds type A. K. P.-14 aviation flood lighting units of which they are installing a number at Balch Beach, Congamond Lake. This company, which has been in business for fifteen years in Springfield, does all types of general electrical construction.


Western Inspectors Silver Jubilee

The western section of the International Association of Electrical Inspectors will hold its twenty-fifth annual meeting at the Book-Cadillac Hotel, Detroit, Mich., August 26, 27 and 28. In addition to the reports of the standing committees and article committees, the convention will give consideration to a number of problems now foremost in the industry.

The bare grounded neutral will be discussed by A. H. Meier, electrical inspector of Evansville, Ind., where this system is in operation, and by Dr. M. G. Lloyd, chief of section of safety engineering, Bureau of Standards.

The solution of flexible cord problems will be discussed by C. W. Abbott, director, distribution engineering, General Cable Company, New York; R. C. Shepard, Underwriters' Laboratories, New York; L. L. Johnson, laboratory engineer, Department of Gas and Electricity, Chicago; J. C. Forsyth, New York Board of Fire Underwriters and Arthur P. Good of the Commonwealth Edison Co., Chicago.

Small town grounding problems



Why good contractors never question A-A

WHEN specifications are laid down for giant modern buildings, contractors do not quickly accept untried products that might damage hard won reputations. Yet throughout the country good contractors never question A-A, be it Code, Red (Intermediate), or Thirty Per cent. For they recognize in this brand a product of unfailing quality.

A-A WIRE COMPANY

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J. C. PENNEY CO.
WAREHOUSE
St. Louis, Mo.**

Architects

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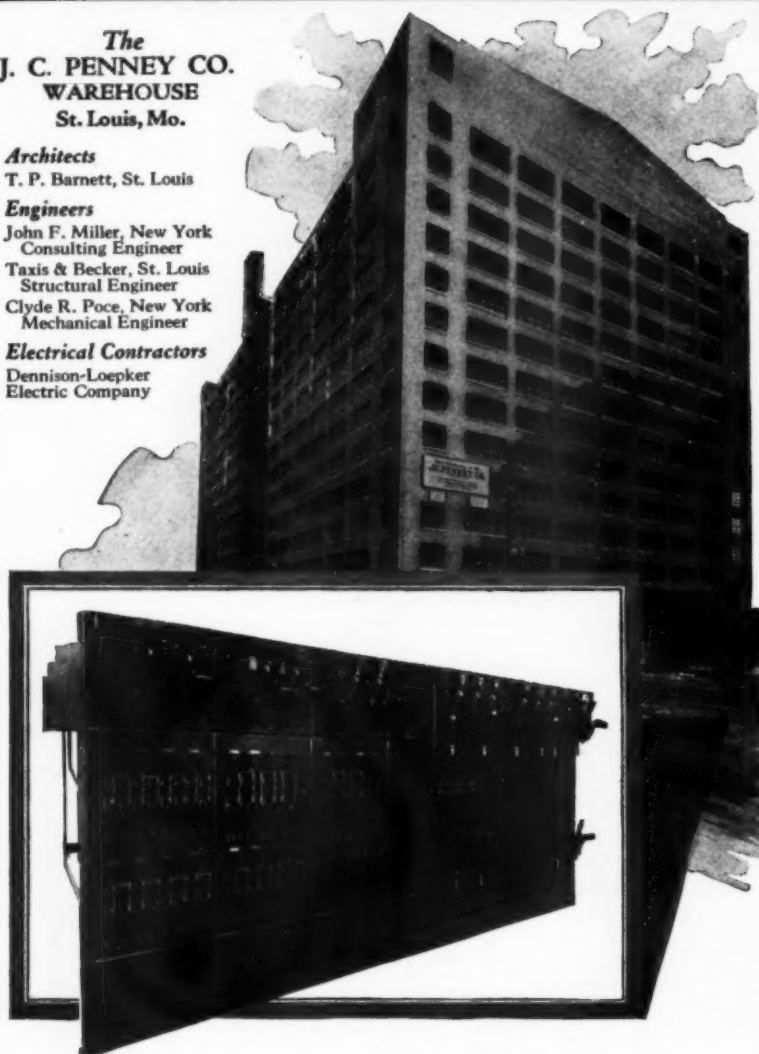
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WURDACK SWITCHBOARDS

are especially designed to meet the requirements of each individual job. They are constructed, erected, completely assembled and electrically and mechanically tested in our plant before shipment. They are shipped in sections, each part being clearly marked, which permits the board to be re-erected and installed with the minimum of time and labor. No cutting or fitting of parts on the job.

Our engineering staff will be glad to co-operate with you in solving your live front switchboard problems. Our widespread experience in constructing hundreds of switchboards, such as the one for the J. C. Penney Company, illustrated above, is at your disposal. Write for details.

WMWURDACK
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444 CLAYTON AVE., ST. LOUIS, MO.

will be discussed by George Welman, of the Louisiana Fire Prevention Bureau, New Orleans; "Meter Service Entrance Breakers" by H. G. Nichols, Westinghouse Electric & Manufacturing Co., Mansfield; "Recent N. E. Code Amendments" by Victor H. Tousley, electrical field engineer, N. F. P. A.

Thomas Templeton of the John H. Busby Co., Detroit, will address the convention on the subject of "The Electrical Contractor with Relation to the Electrical Inspector." The subject of enforcing requirements for adequate wiring is on the program with the name of the speaker to be announced later.

During the convention, time will be given up for trips through local electrical manufacturing plants.

* * *

Adequate Farm Wiring

Extension Bulletin No. 63 of the Kansas State Agricultural College makes fairly complete suggestions for adequacy in farm wiring. While written essentially for the farmer, it contains many suggestions of value to electrical contractors engaging in this class of work.



WIRES EIGHTY-SIX HOUSES IN THREE TOWNS:—Themanson & Leiper, Monmouth, Ill., contractors, make a specialty of wiring up towns that have never had electric light service. George Themanson is on the right here, just starting on the first of eighteen homes and stores in Gerlaw, Ill., seven miles from Monmouth. He has wired fifty homes in Cameron, Ill., and eighteen others in Swan Creek.



The Bankhead-Leland Hotel, Birmingham, Ala., where all of the pipe is Youngstown and all of the conduit is Youngstown-Buckeye.

Architect
H. L. STEVENS & CO.
Chicago, Ill.

Engineer
J. A. DAHL
Birmingham, Ala.

The Leading Conduit

WHEREVER Rigid Conduit is used in North or South America, you will find Youngstown Buckeye preferred, because of its quality, by workmen and contractors alike. Electrical Engineers specify it because they know it is good for a lifetime and can be obtained from the leading dealers everywhere.

Youngstown Buckeye has all the features that distinguish good conduit. It is made of special steel, has great ductility and strength, and both in galvanized and enameled, the protective coating and threading are unequalled.

For a finer electrical installation use Youngstown Buckeye Conduit. If you use it once, you will use it again.

THE YOUNGSTOWN SHEET AND TUBE COMPANY

One of the oldest manufacturers of copper-bearing steel, under the well-known and established trade name "Copperoid".

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| ATLANTA—Healey Bldg. | DETROIT—Fisher Bldg. | PITTSBURGH—Oliver Bldg. |
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| BUFFALO—Liberty Bank Bldg. | MINNEAPOLIS—Andrus Bldg. | SAN FRANCISCO—55 New Montgomery St. |
| CHICAGO—Conway Bldg. | NEW ORLEANS—Hibernia Bldg. | SEATTLE—Central Bldg. |
| CINCINNATI—Union Trust Bldg. | NEW YORK—30 Church St. | ST. LOUIS—Shell Bldg., 13th and Locust Sts. |
| CLEVELAND—Union Trust Bldg. | PHILADELPHIA—Franklin Trust Bldg. | YOUNGSTOWN—Stambaugh Bldg. |
| DALLAS—Magnolia Bldg. | | |
| DENVER—Continental Oil Bldg. | | |

LONDON REPRESENTATIVE—The Youngstown Steel Products Co., Dashwood House, Old Broad St., London, E. C. England

YOUNGSTOWN-BUCKEYE

BENJAMIN-STARRETT

Heavy Duty Lighting Panelboards and Steel Cabinets



*Safety Front Type Heavy Duty
Benjamin-Starrett Panelboard*

The wide variety of circuit arrangements makes it easy to select just the right panel to meet any residence, commercial, institutional or industrial wiring requirement.

Many exclusive Benjamin-Starrett features cut installation time to the minimum, assuring the contractor a sure profit on his panelboard jobs.

The unit sectional construction and individualizing of parts provide the greatest accessibility and flexibility, assuring the highest type of continuous service at a minimum of maintenance expense.



FREE—This 80-page catalog of complete listings and illustrations. Send for it today.

Benjamin Electric Mfg. Co.

General Offices and Factory

DES PLAINES, ILL. (Chicago Suburb)

New York

Chicago

San Francisco

Special Features

Easy to Install

4-inch wiring space on all four sides; adjustable trim clamps; extra large panel mounting holes; slip-off barrier easily removed; one-piece panel back.

Quick Delivery

Boxes carried in stock at local distributors and district warehouses. Unit section construction insures quick assembly of panelboard.

All Parts Removable from Front

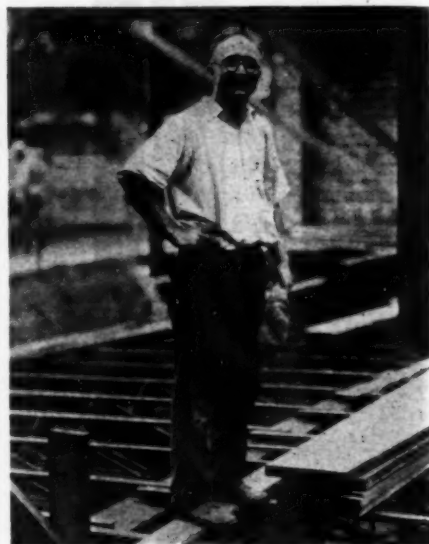
Should replacement of parts ever become necessary, the switches and fuse receptacles are individual units which may be removed without disturbing the trim. Replacements or changes in branch circuits made without removing panel from box.

Heavy Duty Switches

Branch circuit tumbler switches on both two-fuse and one-fuse panels are heavy duty type—30 ampere, 250 volts.

Three Styles of Cabinets

Safety Front, Protective Front and Open Front to suit any specific requirement.



UP-TO-DATE WIRING AND LIGHTING HIS HOBBY:—Ray Richardson, Richardson Electric Co., Galesburg, Ill., likes to put the very latest wrinkles into every job. In this picture he is shown at the new Leif building, on which his men have just started work. This building will have one of the best lighting installations in the territory.

Pacific Coast Inspectors to Meet

The southwestern section of the International Association of Electrical Inspectors will meet at Sacramento, Cal., on September 18, 19 and 20. Among the speakers scheduled are: Dr. M. G. Lloyd of the Bureau of Standards; President J. C. Forsyth; First Vice-President William S. Boyd of Chicago; J. S. Mahan of Chicago and Victor H. Tousley, electrical field engineer for the N. F. P. A.

* * *

Boston League Makes Investigation

The Metropolitan Electrical League, Boston, Mass., has for some time had a trained business investigator making a very complete study of the contracting businesses in the Boston district. Now that this material has been compiled, a very effective plan is being made to sell the public on the value of the electrical installation. A real attempt is to be made to make the public realize the value of the work done by the electrical contractor and to get the public to demand a better and more complete wiring installation. Although the actual workings of this plan are not as yet completed the de-



TYPE "B"
Malleable Unilet with Cadmium Finish



TYPE "C"
Malleable Unilet with Cadmium Finish



TYPE "R"
Malleable Unilet with Cadmium Finish



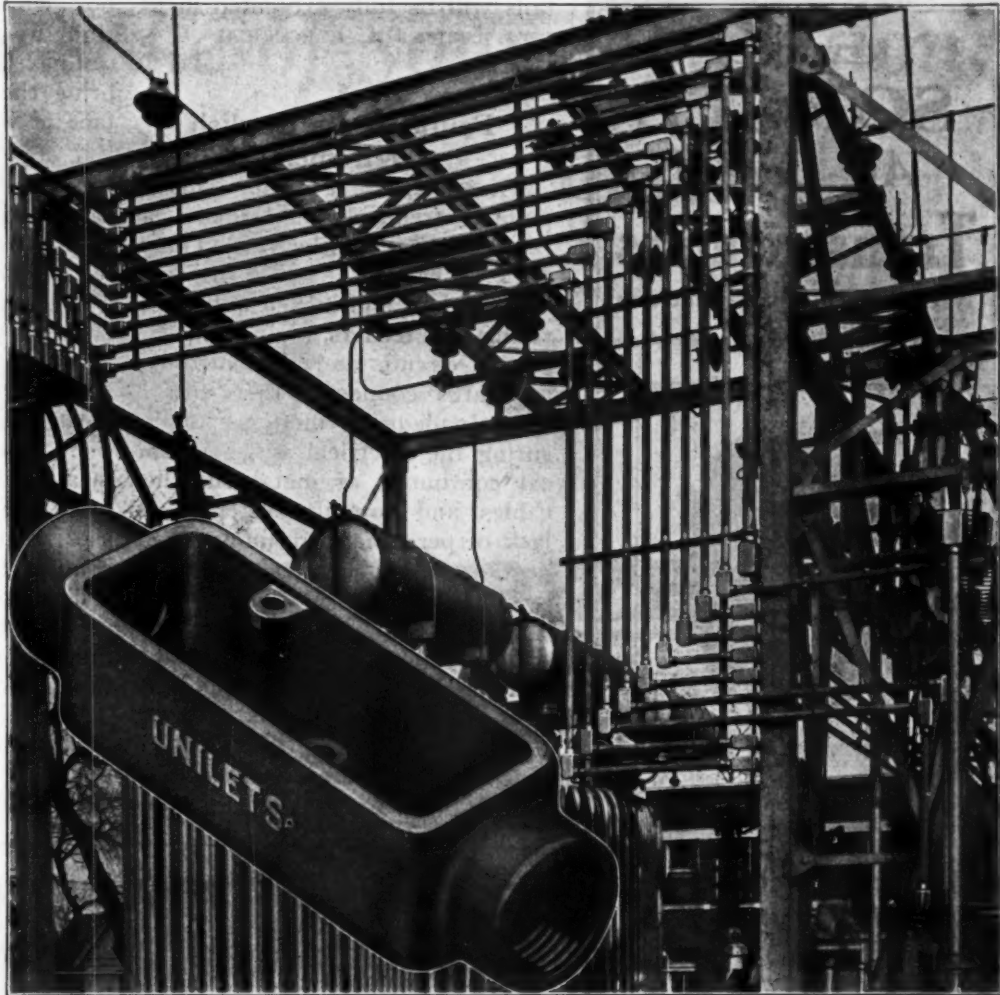
TYPE "LB"
Malleable Unilet with Cadmium Finish



TYPE "T"
Malleable Unilet with Cadmium Finish



TYPE "LRL"
Malleable Unilet with Cadmium Finish
Changing cover gives Type "LL" or "LR"



62 Unilets and a Permanent Job

This picture shows 62 threaded type Appleton Unilets in an installation at a sub station in Missouri. Similar installations are at the main plant.

Out in the open—in all the extremes of winter and summer weather, these Appleton Unilets must stand up under the severest kind of conditions. Here is a real test.

Appleton Unilets are made of malleable iron and cadmium coated. They are practically rust proof and show the greatest resistance to shocks and constant vibration. There is a shape and size for every wiring need.

A new Appleton Catalog is just off the press. Send for it. You'll find it valuable—and there's no obligation.

SOLD THROUGH JOBBERS

APPLETON ELECTRIC COMPANY
1704 Wellington Ave., Chicago, U. S. A.

New York—150 Varick St.
Los Angeles—340 Azusa St.

San Francisco—655 Minna St.
Seattle—628 Railroad Ave.



APPLETON

Threaded Malleable

UNILETS

-Reg. U. S. Pat. Off.

Standard for Better Wiring

APPLETON ELECTRIC COMPANY
1704 Wellington Avenue, Chicago

Gentlemen:

Please send us a copy of New Revised Catalog on Unilets and Conduit Fittings, together with prices.

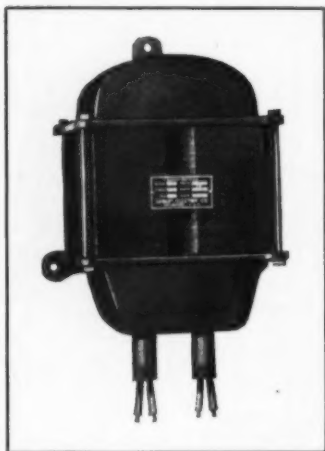
Name

Address

City

State

NEW CODE
SORGEL
Air-Cooled
Transformers
 With Conduit Connections
No Extra Fittings Required



**Tried, Tested
 Approved**

Design is correct. Highly efficient. Low temperature rise—not over 55° at full load.

Can be installed easily and economically right where the change of voltage is wanted, or any other convenient place inside of buildings, without fire-proof vaults or enclosures of any kind.

Approved by Underwriters

Made in Sizes $\frac{1}{4}$ to 50 KVA.

Single-phase, 2-phase and 3-phase

110, 220, 440, 550 Volt

Transformers Designed
 for Special Applications

Ask for descriptive literature

Sorgel Electric Co.
 Clybourn & W. Water Sts.
 Milwaukee, Wis.

tails will be fully presented in future issues of ELECTRICAL CONTRACTING.

* * *

**Faults of the English
 Wiremen**

The nine worst wiring sins in point of frequency in England, as reported in The Electrical Times, are:

1. Serious and inexcusable over-rating of feeders, subfeeders or branch circuits and all controlling apparatus connected therewith.

2. Inadequate methods of insuring the electrical and mechanical continuity of metal sheathed cables and conduit systems and lack of permanent grounding connections for such metal coverings.

3. Leaving the ends of conduit at switch and light outlets or distribution boards without suitable bushing by protective nipples or by a suitable outlet box or wood block.

4. On concealed conduit systems, failure to provide a suitable

box which will protect the wire right up to the surface of wall or ceiling; or alternatively, failure to bring the conduit through to surface of wall or ceiling.

5. In the case of metal sheathed, tough rubber sheathed or similar cables, failure to bring the whole of the protective covering through to the surface of wall or ceiling.

6. Failure to keep clear of used or disused gas pipes in such manner that they cannot be brought into accidental contact, with the wiring or its conduits.

7. The insertion of more wires in a conduit than will allow of at least one more wire, of the same size as the largest already in the conduit, being easily pushed in for a distance of six inches.

8. The absence of reasonable precautions to safeguard against fire and shock hazards.

9. The employment of inadequately paid labor and the use of boys in unreasonable proportion to that of fully qualified wiremen.



BELIEVES IN ADVERTISING:—After being without a store for a year due to fire, Tom Cox of the Cox Electric Co., South Boston, Mass., has opened a fine new place for his contractor-dealer business at 489 Broadway. Cox is a bug on advertising—newspapers, mail, and in front of his new store a big electric sign which dominates all of the other signs on the street. The smile on Tom's face is caused by the fan weather. He's pushing fans hard this year. The upper picture shows his fixture display.

For the sake of your reputation,



Make all your
Sound Installations
BETTER with—

POWERIZER *Power and Super Power* **SOUND SYSTEMS**

POWERIZER is the heart
of broadcasting systems for

| | |
|------------------|-----------------|
| Amusement Parks | Playgrounds |
| Aviation Fields | Public Parks |
| Band Stands | Race Tracks |
| Base Ball Parks | Railroad Depots |
| Camps | Restaurants |
| Churches | Riding |
| Circuses | Academies |
| Civic Centers | Sanatoriums |
| Convention Halls | Skating Rinks |
| Dance Halls | Sporting Arenas |
| Factories | Stadiums |
| Gymnasiums | Steamships |
| Hospitals | Swimming Pools |
| Hotels | Theaters |
| | Yacht Clubs |

It's really amazing, the money that can be made these days, installing Sound Systems in theaters and other public places. The business world has taken to broadcasting in a mad rush, and it is the well equipped electrical contractor who is getting the bulk of this big business. Big units . . . easy work . . . right in your groove . . . and the profits are sweet! Many alert contractors have allied themselves with POWERIZER, the Amplifier of perfect

tonal power, which is the heart of the system. Using our standard amplifier units, together with POWERIZER panels and faders built for this purpose, these contractors are installing sound systems in public places right and left. They have gained franchises in their territory . . . are building up a sound reputation for PERFORMANCE, by concentrating on POWERIZER units. What are YOU doing to get your share of this volume, this good will, this prestige? Do you realize how much EASIER and MORE PROFITABLE this type of business is . . . and how much we can help you to land it?

Several Choice Territories Still Open for the Right Contractors with the Right Outlook

We want to talk brass tacks with contractors who can see the possibilities in Sound Installations. We are ready to help them, to protect them. A lifetime of acoustical experience, attested by the fine amplifying and control mechanisms bearing our trade-mark, is at your disposal . . . if you are ALIVE to the opportunity we are offering. Get in touch with us at once.

Literature and Questionnaire on Request

RADIO RECEPTOR COMPANY, INC.

106 Seventh Avenue, New York City

SERVICE AGENCIES IN IMPORTANT CITIES

Licensed by Radio Corporation of America and Associated Companies



POWERIZER 2-channel amplifier
panel, capacity 15 watts per channel

"TITE BITE"



NEW! SQUEEZE CONNECTOR

Catalogue No. 300

*Saves you
time—
Speeds profits*

Here is duck soup for
contractors—faster installation
and work that stands up.

TABOLITE
finish SUPERIOR GALVANIZING

Approved by National Board

Takes wide range of Cable sizes:

| | |
|------|------------------------|
| 14-2 | Wire Armored Cable |
| 14-3 | " " " |
| 12-2 | " " " |
| 12-3 | " " " |
| 10-2 | " " " |
| 10-3 | " " " |
| 3/8" | S. S. Flexible Conduit |
| 3/8" | D. S. " " |

WRITE FOR FREE SAMPLE—

Order today from your jobber, or write
us direct, giving us his name.

THE THOMAS & BETTS CO.

15 Park Place, New York City
Factory—Elizabeth, N. J.

A. E. I. Notes

(Continued from Page 32)

for A.E.I. charter affiliation. In addition, there have been many new inquiries during July indicating a growing interest in Electragist Chapter organization throughout the United States and Canada.

Arrangements are being completed for Chapters in Vancouver, B. C.; Hamilton, Ont.; Spokane, Wash.; Seattle, Wash.; Minneapolis, Minn.; Springfield, Ill.; Louisville, Ky.; Canton, Ohio; and Syracuse, N. Y.

In many instances, several

weeks have been required in concluding the charter affiliation, due to local circumstances preventing immediate compliance with the chapter eligibility requirements, to misunderstandings of the conditions upon which charters may be granted, and to other natural delays. This has been more marked where the negotiations have been conducted entirely through correspondence, where an A.E.I. representative has not yet had the opportunity to present the details of procedure directly to the local organizations.

The headquarters office is mak-

ELECTRAGIST CODE OF PRACTICE

Adopted for the General Guidance of Members

I. Contractors will submit bids for electrical work upon condition that a full set of plans, specifications and general conditions be placed at their disposal for a reasonable time, free of cost, for use in their office for the purpose of preparing an estimate.

II. The standard form of contract of the American Institute of Architects is to be the basis used for all bids, unless otherwise mutually agreed upon.

III. The contractor shall be paid monthly in cash at least 85 per cent of the value of the materials delivered and the labor performed.

IV. Each contract shall provide for the prompt payment, and require final inspection and payment in full within thirty days of the completion of the work covered by said contract, regardless of the final settlement for the building as a whole or for the work of any other trade.

V. Differences arising between the contractor and other parties on a contract are to be subject to and settled by arbitration.

VI. The contractor shall not be responsible for loss due to any delay in the execution of the contract when such delay is in no way the fault of said contractor. The time lost by reason of strikes, lockouts, fire, washouts, delays by transportation companies or any other cause, over which the contractor has no control, will be added to the time of completion of the work covered by the contract.

VII. The contractor does not estimate on or include any charges for surety bonds, insurance not required by law, or any general charges for cleaning, removal of rubbish, patching or repairing of plaster, brick or terra cotta work, breaking of glass, office or telephone service, water, light, heat,

fire insurance, use of general gangway, scaffolding, use of hoisting facilities, stenographer, watchman, erection of temporary structures, enclosures or stairs, or any other similar charge, unless mutually agreed upon in advance.

VIII. The contractor shall not be required to cut any work, except his own, and shall not be required to cut, alter or move his own work if due to any cause for which he is not responsible.

IX. Unless specifically provided for in the contract, an extra charge will be made for any special finish or variation from the standard materials. By "standard materials" is meant standard material as regularly listed by the manufacturer whose product is specified.

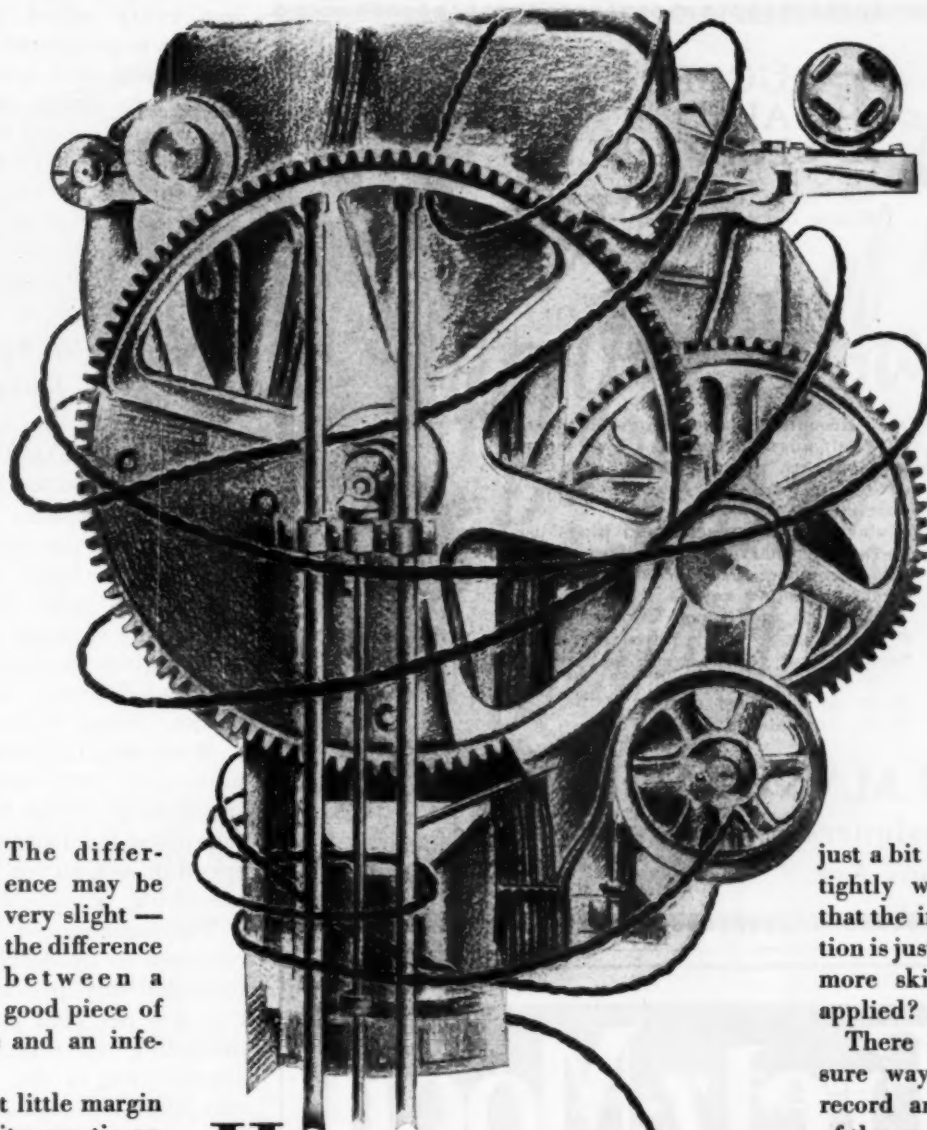
X. Changes in or additions to contract plans or specifications shall be made the subject of estimate or shall be based on the time and materials involved.

XI. If the regular and normal progress of the work is held up due to extras or changes or other causes over which the contractor has no control, an interference or interruption charge shall be made, depending on the extent of the interference or interruption.

XII. A fair price will be charged for drafting or engineering services when the contractor is called upon to render such services.

XIII. The contractor shall not include temporary work in his estimate unless the quantities are distinctly stated. In no case should be included in an estimate maintenance or cost of current except on a percentage basis.

XIV. "Cost" shall be understood to mean cost of material and labor and the administrative or overhead expense of the contractor.



The difference may be very slight — the difference between a good piece of

insulated wire and an inferior one.

But just that little margin of dependability can tie up (or not tie up) machinery, plans, and programs at crucial moments.

Wise electrical contractors know that a few cents' difference in initial cost and quality makes dollars' difference in final expense. They know that public appreciation of this difference is growing steadily.

But is there some way in which good wire, good conduit, and good wiring supplies can beyond doubt make their dependability manifest in advance? Some way that will reveal that the copper is more nearly electrolytically pure, that the rubber is just a bit more homogeneous, that the braid is



just a bit more tightly woven, that the insulation is just a bit more skilfully applied?



There is a way — and a sure way. The name, the record and the experience of the supplier are a positive guide to quality and dependability — more truly so in wire, conduit and wiring supplies than in things whose virtues are less hidden.

There is, for instance, an entire class of wiring supplies — complete to the last and least item — and endorsed by a name which goes back to the beginning

of the electrical industry. The record of these wiring supplies is a record of electricity in America. The experience of the supplier is an experience with every conceivable kind of electrical installation. Of course... obviously... they are Graybar wiring supplies.



How to tie up the works... *and how not to tie them up...*

GraybaR

Successor to *Western Electric* Supply Dept.

Offices in 72 Principal Cities
Executive Offices: Graybar Building
Lexington Ave. and 43rd St., New York



THE GRAYBAR TAG—
SYMBOL OF
DISTRIBUTION



Type AN

RUGGED ALCO RECEPTACLES

Are made for all classes of
Heavy Duty Service.



Type CN



Type PN



Type HN



Type DN

The Receptacles and Plugs illustrated have self aligning floating sleeve and pin contacts, arc resisting insulators, screw covers, water proof or water tight as ordered.

Water tight receptacles and plugs used on boats, wharves, in gardens and in factories where air is heavily laden with steam and other vapors.

Made in 2 and 3 pole 250 volts A.C. 30 amperes. (If required in higher capacity and voltage write us.)

Very easy to wire.

Built right—priced right.

Write for bulletin 105.

RALCO MANUFACTURING CO.

Designers and Manufacturers

125 N. Albany Ave.

CHICAGO, ILL.

ing every effort to clarify the simple requirements for all applicants, and with only eight weeks remaining before the Swampscott Convention, every local contractor group is urged to file its application for charter affiliation immediately so that it may be approved and chapter voting rights authorized prior to the convention.

* * *

Wage Tables and Inspection Data

On July 15, the 1929 revision of Electragist Data Book—File 3—was mailed to every Electragist. The data includes up-to-date information on prevailing wage rates and hourly rates of charge for electricians and helpers as reported by almost one thousand Electragists in approximately six hundred different cities and towns of the United States and Canada.

More than two hundred and fifty municipal and underwriters' inspectors furnished the information regarding local ordinances and inspection service in the communities listed.

The number of questionnaires returned to headquarters this year exceeded any previous return between 5 per cent and 10 per cent indicating an increasing member appreciation of the value of accurate statistics and of exchange of information through the A.E.I. as a clearing-house.

Many requests are received in the course of a year for similar data concerning cities and towns not listed, and although the 1929 increase in returns has improved

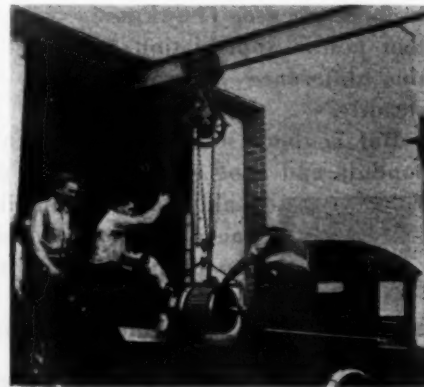


Fretz-Moon

FRETZ-MOON TUBE CO., Butler, Pa.

It is easy to get the right
conduit—just ask for and
insist on FRETZ-MOON!

RIGID CONDUIT



MOTOR REPAIR SPECIALISTS:—An armature being brought into the shop of the Koeneman Electric Co. of Jackson, Miss. The trolley runs around the entire repair floor.



Experience
40 Years of it
The back ground
of each Bryant
Wiring Device

THE BRYANT ELECTRIC COMPANY manufactures over twenty-five hundred "Superior Wiring Devices." Bryant Sockets, Attachment Plugs, Receptacles, Switches, Plates, Fuses and Hemco Plural Plugs are built for greatest efficiency in electric light and power control in your homes, offices, stores, warehouses, factories and hospitals.

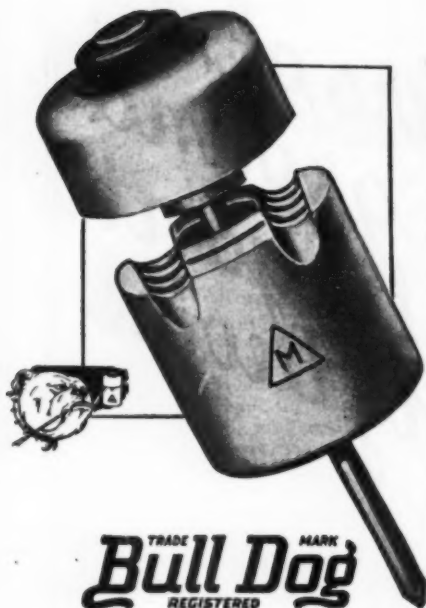
**SUPERIOR
WIRING DEVICES**



The
BRYANT
ELECTRIC COMPANY
BRIDGEPORT, CONNECTICUT



"It has a grip like its namesake"



Split Knobs

THESE are the safe, approved knobs for all types of residence wiring. They mean better jobs at no added cost. Bull Dog Split Knobs, together with Illinois Porcelain Tubes, Cleats and Solid Knobs form a complete line of standard porcelain.



Sold Through Wholesalers

Illinois Electric Porcelain Co.
Macomb, Illinois

the file to that extent, the data can be of greatest service only when every Electragist co-operates to make the list complete.

* * *

Convention Credential Forms

In accordance with Article III of the A.E.I. Constitution, Credential Forms for the use of Chapter delegates will be issued not later than August 15th from the headquarters office to all Chapters of record of that date. Upon approval of delegate's credentials by the Credentials Committee at the convention, delegates' voting certificates will be issued to be used in the official ballot. Every Electragist should familiarize himself with the Association's voting procedure, adopted last year under the amendments to the A.E.I. Constitution. For convenient reference, Article III is here quoted in full:

"Sec. 1. The voting at annual or special Conventions shall be as follows:

Chartered or affiliated Associations composed entirely of Electragists (members of the International Association in good standing) shall have a right to send a delegate or delegates, members of the Association, properly accredited, who shall be entitled to cast the vote on the official ballot of each member of their Association.

The expenses of such official delegates will not be paid by the Association of Electragists, International.

Sec. 2. Credential Forms shall be mailed by the International Secretary to all chartered or affiliated associations at least forty-five (45) days before each convention.

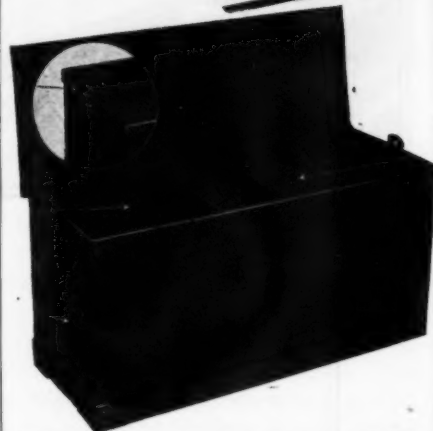
Sec. 3. Upon arrival at the conventions, delegates representing Associations shall file with the Credentials Committee, to be appointed by the President, their credentials for approval and the issuance of Delegates' Voting Certificates to be used in the official ballot.

Sec. 4. Members of the International Association who are not members of any chartered or affiliated association shall register upon arrival at the conventions and receive from the Credentials Committee individual Members' Voting Certificates to be used in the official ballot.

A member of a chartered or affiliated association who desires to cast his individual ballot separately from the vote of his association delegation must so signify at the Convention and receive from the Credentials Committee an individual Member's Voting Certificate to be used in the official ballot and his vote shall be deducted from the total votes accredited to the association delegate.

Sec. 5. The official ballot must be called for in the Convention prior to the submission of a question to the house; otherwise the usual form of viva voce voting shall prevail."

YOUR NAME STENCILED ON THIS *New*



TOOL BOX AND MATERIAL HOLDER *free!*

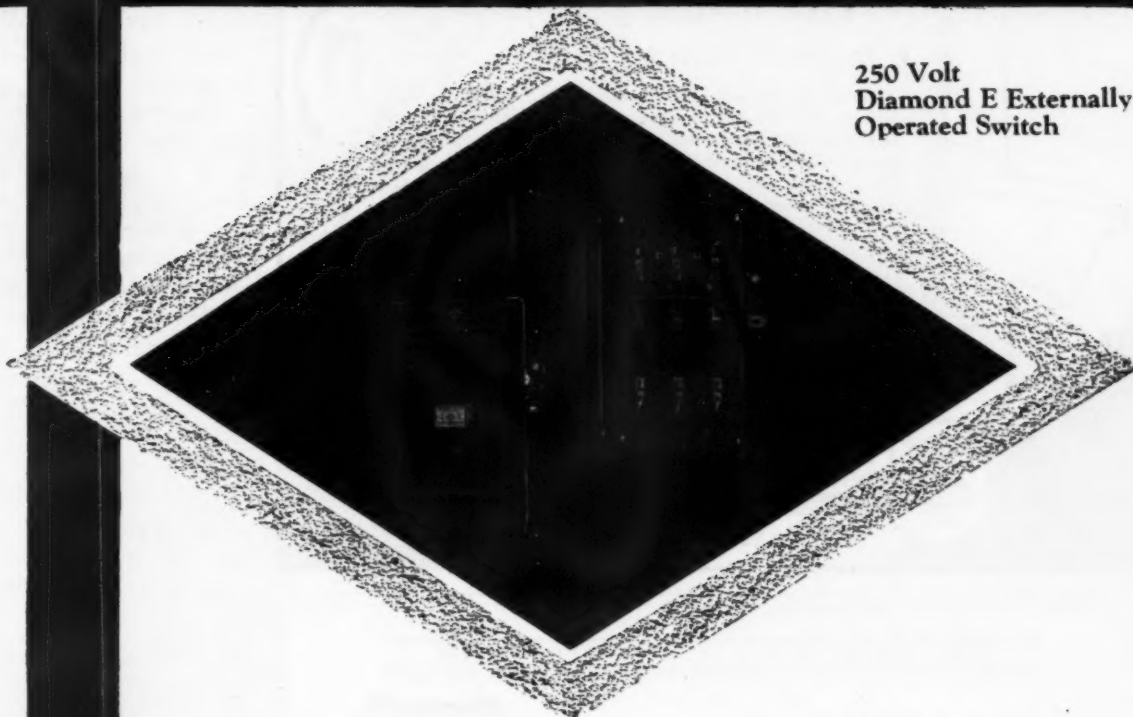
This new all-steel, theft-proof, portable locker is designed to meet the exact needs of every contractor and wireman. Sturdy construction—and note the lock arrangement. Your property is safe in this box. Angle iron full length of box permits tray to be moved in either direction without removal to get at material stored in bottom of box. Four compartments to accommodate any number of small fittings and ample room for tools. Just what you have been looking for and you can carry it anywhere and leave it with safety.

Order today from your jobber, or write us direct, giving us his name.

ELECTRIC APPARATUS CO.

Manufacturers of Switch and
Panelboard Steel Cabinets
702-706 N. HALSTED ST.
CHICAGO

TROUBLE-PROOF SWITCHES



250 Volt
Diamond E Externally
Operated Switch

OTHER DIAMOND E PRODUCTS

Magnetic Switches
Panels and Panellets
Automatic Motor
Starters
Pumping Plant Panels
Stage Switchboards
Wiring Gutter
Pull Boxes
Steel Cabinets
Load Testing Sets
Ground Clamps
Cable Taps and Other
Electrical Products

DIAMOND E externally operated Switches provide a maximum of safety, strength and service. They are designed "Trouble-Proof." Covers can be locked "Closed" or switch can be locked in "on" or "off" positions—preventing unauthorized re-fusing or tampering or operation at times to endanger workmen or machinery. Code Gauge steel cabinets provide protection. Quick break mechanism reduces possibility of spring breakage to a minimum. All Cadmium plated current-carrying parts—providing extremely low contact resistance. Laboratory tests show that Diamond E X-O switches will carry 100% overload without excessive heating. The safest, longest-service switch on the market. Write for new literature describing all types X-O Switches.

DIAMOND ELECTRICAL MANUFACTURING COMPANY INC.

Associated Manufacturers

FACTORIES
Los Angeles, Calif.
1318-1362 E. 16th St.
Houston, Texas
1517 Fannin St.

DISTRIBUTING OFFICES
Seattle, Wash.
Robinson Sales Company
617 4th Ave.
Portland, Oregon
Joseph Paulson
218 Commonwealth Bldg.

Union Electric Mfg. Co.
Milwaukee, Wisconsin

Manila, P. I.
Mora Electric Co.
7 Calle Soda

SALES OFFICES AND STOCK

Cleveland, Indianapolis, Detroit, Buffalo, Baltimore, New York, Philadelphia, Boston, Toronto, Montreal,
St. Louis, Toledo, Grand Rapids, Chicago, Cincinnati, Pittsburgh, New Orleans, Birmingham

FACTORIES
Milwaukee, Wis.
926 Juneau St.
San Francisco, Calif.
1264 Folsom St.

DISTRIBUTING OFFICES
Denver, Colo.
O. H. Davidson Equipment Co.
130 W. 14th Ave.
Salt Lake City, Utah
Farr Electric Service
228 South West Temple St.



Levolver Link Switch

*Use Them in
Chain Fixture Jobs*

A small, good looking, sturdily built switch that fits between two links of any chain fixture without altering the length of the fixture. Easily installed, away from the heat of the lamp, without rewiring or splicing of the lead wires.

Consists of only 3 parts—Levolver Fixture Switch, Levolver Link and locking attachment. Brushed brass or Jap bronze finishes. Also special finishes as required.

Get them from your jobber

Levolver
 Pull Switches
 Pull Handles
 Control Buttons
 Plugs, Levers, Pull
 and Jo-Bottoms
 Various
 Hinges

McGILL

MANUFACTURING CO.
Electrical Specialties of Quality
ESTABLISHED 1904
VALPARAISO • INDIANA

LONG
 Lamp Guards
 Lamp Colorings and
 Finishing
 Soldering Flux
 Blow Torches
 Lamp Changers

Lien Rights

By Leslie Childs

AS a general rule, a seller of electrical labor and equipment used in the construction, alteration or repair, of a building will be entitled to a mechanic's lien for the amount of his claim. In other words, electrical work and materials, where they become an integral part of a building, may be made the basis of a lien on a par with other classes of labor and materials used in a structure.

However, owing to the nature and use of electrical equipment, it is frequently installed without becoming a part of the realty. As, where it is placed in a building for the particular use of a tenant or lessee, and takes on the character of trade fixtures. In such case, a seller of such equipment may be denied a lien for this reason which otherwise would be granted.

Needless to say, there is a point of law here that should never be overlooked by electrical dealers and contractors when labor and materials are being furnished in



THE ANSONIA ELECTRICAL CO.



A NEW DOUBLE COIL BELL No. 657

**Stamped Steel Cover and Base
An Unusually Excellent Bell
at a Very Low Price**

WRITE FOR SHEETS

Supplied in gray enamel only.

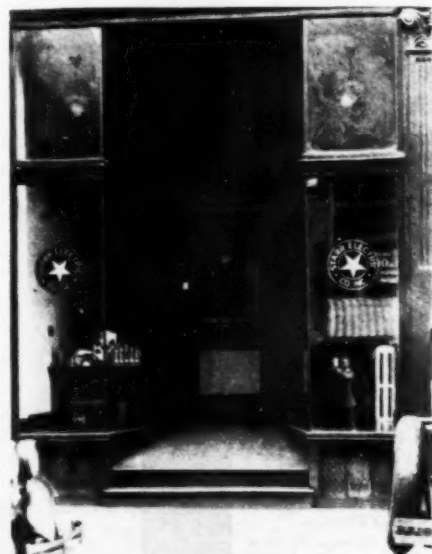


Write for this 64-page catalog E which shows a complete line of Annunciators, Bells, Push Buttons and other electrical house goods.

THE ANSONIA ELECTRICAL CO.
ANSONIA, CONN.

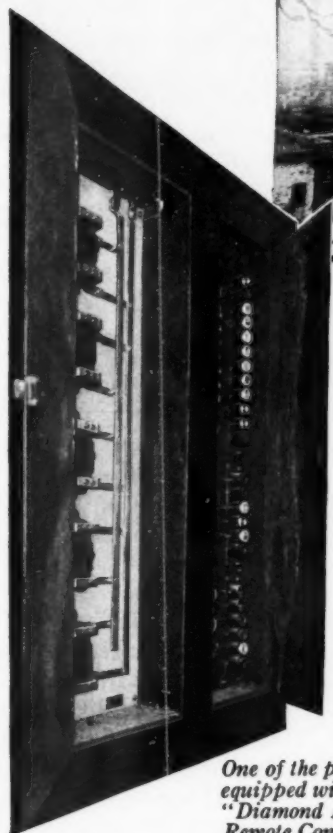
**ANNUNCIATORS — BELLS
BUZZERS—PUSH BUTTONS**

ELECTRICAL HOUSE GOODS



OPENS NEW STORE:—The new store of the Star Electric Co., at 18 Dwight St., Springfield, Mass. B. C. Star started this organization more than twenty years ago, during which time a wide variety of electrical construction has been done. Five and a half years ago the organization was incorporated, and at that time A. F. Page joined the company. Mr. Page was formerly with the Westinghouse Electric & Manufacturing Co. for fifteen years. The new headquarters provide a roomy office and large shop and stock room.

Lighting in Fort Worth Club "Diamond H" Controlled



One of the panels
equipped with
"Diamond H"
Remote Control
Switches



The Fort Worth
Club Building
Fort Worth,
Texas

The first five floors of this fine building are occupied by one of the finest furniture stores in the South.

The lights on the third floor are all "Diamond H" controlled.

The balance of the thirteen stories is occupied by the Fort Worth Club. "Diamond H" Remote Control Switches control the building lights thruout.

Engineers recognize the dependability of "Diamond H" Switches and include them in the wiring plans of buildings where many circuits are used and simple, effective control of lighting circuits is desired.

Architects: Wyatt C. Hedrick Inc.,
Fort Worth, Texas
Elec. Eng.: Henry W. Skinner,
Fort Worth, Texas
Elec. Conts.: Eugene Asche Electrical Co.,
Fort Worth, Texas

*A new Bulletin No. 10, all about Remote Control,
just off the press. Send for a copy.*

THE HART MANUFACTURING CO.
HARTFORD, CONN.



DALLAS

BOSTON

SAN FRANCISCO

NEW YORK

CHICAGO
TORONTO, CANADA

DETROIT

PHILADELPHIA

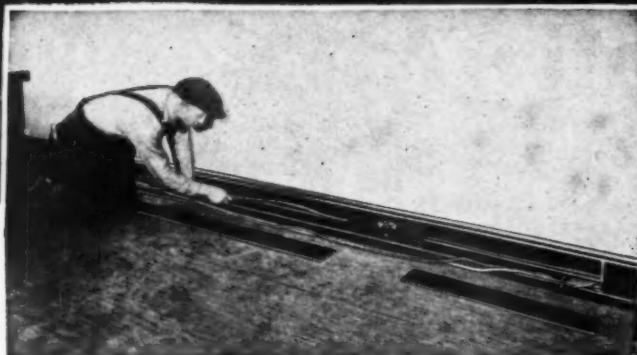
MINNEAPOLIS

CLEVELAND

DIAMOND H SWITCHES

CONDUO-BASE

Ready for Wiring for Any Electrical Appliance



Five Minutes Work for a New Outlet

The demand now-a-days in office buildings, public buildings, even in homes, is for Outlets and more Outlets located where most convenient. **ELECTRIC BRANCH CIRCUIT DISTRIBUTION IN CONDUO-BASE IS THE ONLY ANSWER.** The housewife may now change the location of her floor lamps, electric toaster, radio and what not, to just where she may want them. In office and public buildings, dictaphones, adding machines, buzzers, desk lamps and telephones can now be

plugged in where they are most needed.

Every Electrical Appliance leads to a prospect for wiring in CONDUO-BASE. And every job needs anywhere from a few to hundreds, yes, in some cases thousands of Convenience Outlets. **GRASP THIS OPPORTUNITY OF THE EVER WIDENING MARKET. SELL THE IDEA OF CONDUO-BASE TO YOUR PROSPECTS AND INCREASE YOUR ELECTRIC WIRING BUSINESS.**

Write us for further information

Licensed Manufacturers

Dahlstrom Metallic Door Co.
Jamestown, N. Y.

The United Metal Products Co.
Canton, Ohio

Knapp Brothers Mfg. Company, Chicago, Ill.



Borders



Direction Signs



Foots



Olivettes



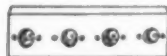
Chromium Reflectors



Floods



Louvres



Strips



Spots



Changeable Canopy Letters

LED BY **BEL-SUN-LITE**

Theatres Have "Gone Chrome!"

Try to sell a theatre manager anything but Bel-Sun-Lite. By introducing chromium reflectors to the theatre, Bel-Sun-Lite has made profits larger and selling easier for wiring contractors. Bel-Sun-Lite delivers twice the light from the same wattage. Its first cost is lowest. Its maintenance is a trifle. It puts brilliance and snap into acting which brings bigger, better-paying houses. These things go straight to a showman's heart and make him sign for a complete installation. Try it and see.

Ask our representative to help you. Look for his name and address in the classified phone book of the nearest of these cities, or write us.

Atlanta, Ga.
Buffalo, N. Y.
Delaware, O.
Ft. Worth, Tex.
Gary, Ind.
Houston, Tex.
Indianapolis, Ind.

Kansas City, Mo.
Los Angeles, Cal.
Miami, Fla.
Minneapolis, Minn.
New Orleans, La.
Omaha, Neb.
Philadelphia, Pa.
Pittsburgh, Pa.

Richmond, Va.
St. Louis, Mo.
San Antonio, Tex.
San Francisco, Cal.
Seattle, Wash.
Tampa, Fla.
Tulsa, Okla.

Belson Manufacturing Co.
804 Sibley St. Chicago, Ill.



FINDS PROFIT IN MOUNTAIN RESORT WIRING:—L. E. Terry, Boulder, Colo., finds a profitable source of business in wiring mines, mountain resorts and homesteads within a radius of fifty miles of Boulder. "The average citizen," he says, "wants his vacation home in the mountains as completely wired as his city home, and his wife demands all the electrical conveniences that she has been accustomed to in her city residence."

any considerable amount. And, as an illustration of the possible danger in a situation of this kind, the Nevada case of Reno Electrical Works v. Ward, 274 Pac. 196, may be reviewed with interest and profit.

In this case, the electrical contractor installed fifteen electrical fans in a building owned by the defendant, at the instance of the lessee of the building, who was operating a restaurant therein. Two were exhaust fans, and the other three were oscillating fans.

The housing for the exhaust fans was secured to the walls by screws and nails, while the oscillating fans were secured by nails. The total price of the work and material was \$1,005.70, which the lessee agreed to pay. The latter paid the sum of \$357.50 on the bill, but meeting with financial reverses failed to pay the balance, and the plaintiff filed a lien upon the building.

Now, there does not appear to be any question but what the plaintiff would have been entitled to its lien had the equipment become a part of the realty. This for the reason that under the Nevada law every person furnishing labor or materials used in the



**You Will Find
Quality Installations
In Good Buildings**

There's beauty within a building, too, when the best rigid conduit is installed; quality does not stop with appearances.

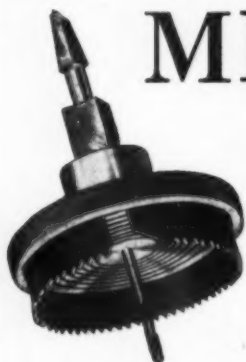
Mohawk Rigid Conduit has the approval of contractors; it is made heavy; impervious to acids; durable as the building. — Tough enamel; smooth, glossy finish. Pipe bends so easily, you hardly realize it is steel. — And, clean even threads that make work a joy.

Mohawk Conduit may be had in either Indian Black (enamel) or Indian White (galvanized).

MOHAWK CONDUIT CO., INC.

COHOES, NEW YORK

BRANCH OFFICES: NEW YORK - CHICAGO - PHILADELPHIA - BOSTON
 INDIANAPOLIS - NORFOLK - MINNEAPOLIS - DENVER - SEATTLE
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MISENER

Products

make the job
more profitable

Misener Rotary Hack Saw

for cutting clean, quick holes in metal, slate, marble and bakelite. B-2 Tool embodying 9 conduit sizes— $\frac{3}{4}$ " to 4", blade depth, $\frac{1}{2}$ "—\$13.50. B-4 Tool, 6 conduit sizes— $\frac{1}{2}$ " to 2", blade depth, $\frac{1}{2}$ "—\$7.00.

Misener Safety Conduit Seals

of heavily waxed fibrous stock makes exposed conduit air and water-tight while conduit is being installed. Easily punched out with screw driver when ready to fish the wire. Prices— $\frac{1}{2}$ " package of 500, .20 per hundred; $\frac{3}{4}$ " package of 250, .25 per hundred; 1" package of 250, .25 per hundred; $1\frac{1}{4}$ " package of 150, .30 per hundred; $1\frac{1}{2}$ " package of 150, .35 per hundred; 2" package of 150, .50 per hundred; $2\frac{1}{2}$ " package of 100, .70 per hundred; 3" package of 100, .90 per hundred. Tools, Blades, Seals Patented.



Misener &
Irving Mfg. Co., Inc.
Syracuse, N. Y. Dept. A.



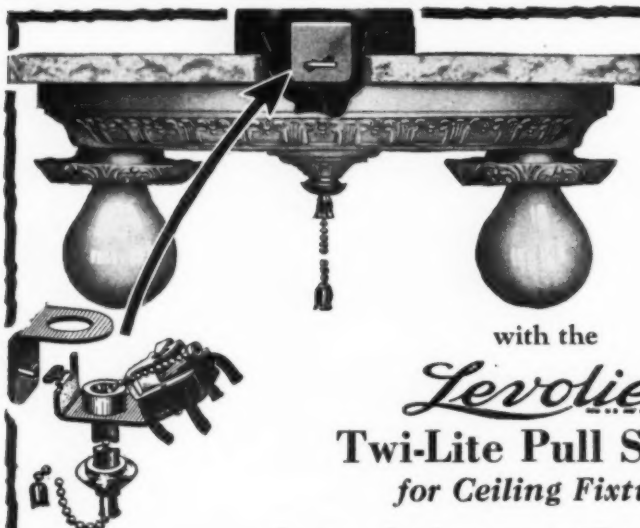
HANDLES AFFAIRS OF MEMPHIS ASSOCIATION:—In spite of the fact that W. W. Rice had never been actively engaged in the electrical business, he is doing a fine job as manager of the Memphis Electrical Contractors' Association. This picture was taken in his office in the Dermon Building. His secretary is Elizabeth Clift, daughter of the late R. L. (Bob) Clift.

construction, alteration or repair, of a building was entitled to a lien. And, it appears without conflict that this equipment was furnished in the alteration of the building, so that the lessee might use it as a restaurant.

However, the defendant, building owner, resisted liability for this lien on the ground that the equipment was never intended, and never did become a part of the realty; that it was installed merely for the convenience of the lessee, was thereafter removed, and should be held to be trade fixtures.

Upon the trial of the cause, the trial court held that in consideration of the way in which the fans were attached to the building they became a part of the realty. In line with this finding, judgment was rendered in favor of the plaintiff for its lien. From this, the defendant appealed to the higher court and here, after a review of the facts as they have been outlined, the court in passing upon the question raised reasoned, in part, as follows:

"The mere fact that the fans were a necessity for the tenant to carry on its business is not sufficient to subject the defendant lessor's property to the lien. The material and labor furnished related solely to the defendant's business. There is nothing in the evidence to show that it was the intention of the lessee or the



They Can
Dim the
Lights
Any Time

with the

Levolver Twi-Lite Pull Switch for Ceiling Fixtures

Easily wired on
the job. One-
third normal cur-
rent; one-seventh
the light.

On any job where you install ceiling fixtures be sure to include the Levolver Twi-Lite Pull Switch with its "Dim—Bright—Off" feature, and make it a permanent part of the fixture.

For use in sickrooms, nurseries, bedrooms. Desirable for hotels and hospitals.

Your jobber will supply you anytime



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MANUFACTURING CO.
Electrical Specialties of Quality
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Prest-O-Lite Is The Modern Blow-Torch

. . . Instantly ready, simply turn on the gas and light it . . . no lost motion . . . operates unfailingly and efficiently in any kind of weather, inside or out of doors . . . Moderate initial cost and economical—wastes no fuel between jobs—lasts indefinitely.

Prest-O-Lite torches fit every blow-torch need—do every heating, brazing or soldering job quicker, easier, better and at lower cost.

'Phone the Prest-O-Lite Gas Distributor about this equipment or write us direct for complete information.



Prest-O-Lite is available everywhere. Anyone of 15,000 Prest-O-Lite Exchange Stations can supply you quickly with a full tank.

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GAS**

THE PREST-O-LITE COMPANY, Inc.

Unit of Union Carbide and Carbon Corporation



NEW YORK, N. Y.
Carbide and Carbon Building

SAN FRANCISCO, CAL.
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IN CANADA: The Prest-O-Lite Company of Canada, Ltd., Toronto

**LONG
LASTING
PERFORMANCE**

ALTMAN DESK
AND
TABLE PUSHES



Require little or no attention once they are installed . . . and they give the kind of service your customers expect. Finished in golden oak and mahogany—special finishes extra. Manufactured in round and rectangular styles—the rectangular with or without name plates as desired. Order today from your jobber, or write us direct giving us his name.



CABLE HANGERS

Minerallac Cable and Conduit Hangers are strong, easy and quick to install. Made of spring steel and carry the approval of the Underwriters' Laboratories.

Insulating Compound

Minerallac Insulating Compound for use on high tension lines in Cable Joints, Potheads, Terminal Bells and Transformers or for low tension lines to protect telephone conductors, instrument parts and small coils.

Your jobber will supply you

**MINERALLAC
ELECTRIC CO.**
25 NORTH PEORIA ST.
CHICAGO ILLINOIS



ONLY ELECTRIC STORE IN CITY:—C. J. Smith, the only contractor-dealer in Mason City, Ia., and his new store. He specializes in house jobs and remodeling work.

lessor that the fans and insulating material were intended to be or become a part of the realty.

"It is true, the housing was secured to the walls of the building by screws and nails, but not so secured as that the fans and materials could not be removed without injury to the housing, and also the building. The proof shows that they were actually removed from the walls and the building subsequently rented to a Chinese physician.

"The material furnished had no relation to the permanent improvement of the property of the lessor or the enhancement of its value. But if we assume that they were improvements, they were merely trade fixtures, which did not constitute an integral part of the realty. Consequently plaintiff's claim of lien was not established. Mechanic's lien statutes do not allow a lien for trade fixtures or chattels, fixtures, improvements, or additions which a tenant will be permitted to remove at the expiration of his term. * * * The judgment is reversed."

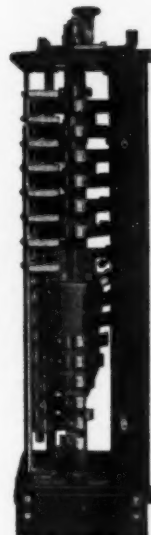
* * *

BOOK REVIEWS Farm Wiring Treatise

A fairly complete treatise on farm wiring for the farmer has been printed by the Committee on the Relation of Electricity to Agriculture, 1120 Garland Bldg., Chicago, Ill. Throughout the book the farmer is urged to have his wiring done by a competent contractor. The book, while not attempting to

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The
Most Complete Line of
Drum Controllers
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Cylinder Construction

Non-Reversing Type. Cylinder is a one-piece brass or aluminum casting.

Reversing Type. The brass or aluminum rotating cylinder consists of only three pieces—two castings for the primary switch mechanism and one casting for the rotor circuit.

Mounting. Castings are mounted on a square steel shaft, insulated by a square tube of mica 1/8 inch thick. Break-down voltage 60,000 volts.

Perfect Contact Surface. The two castings used on the primary are joined electrically by electrical brazing. Clamping bolts carry no current. After assembling, the cylinders are ground absolutely true to size, with a perfect contact surface to which the copper segments are attached.

Segment. Soft drawn copper, cold pressed to shape. Inside of segments are lapped, cleaned in an acid bath; fastened to the cylinder with cadmium plated screws. Segments are renewable.

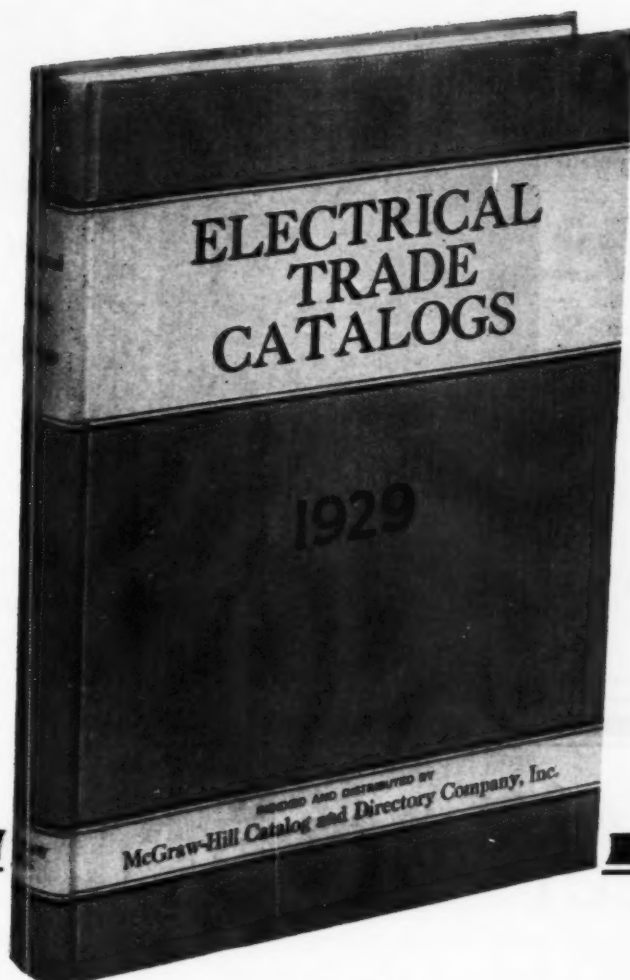
Bearings. Arguto Oilless Bearings at both ends of cylinder shaft. Under the steel thrust washer which supports the cylinder at the lower end of the shaft there is placed an Arguto Thrust Washer. This combination makes operation of the controller free and easy at all times.

For complete details see our
Publication 500

UNION ELECTRIC MFG. CO.
10th and Juneau, Milwaukee, Wis.
Manufacturers of
Electric Motor Control Apparatus

Also Associated Manufacturer with,
and Eastern Distributor for
DIAMOND ELECTRICAL MFG. CO.
Los Angeles, Cal.
Magnetic Motor Control Apparatus

The Catalog Place of the Electrical Trade



Look it up in this Binder!

The Green Book with the Orange Bands — whenever you need information on what or where to buy!



Holtzer-Cabot
SIGNAL SYSTEMS
ESTABLISHED 1875

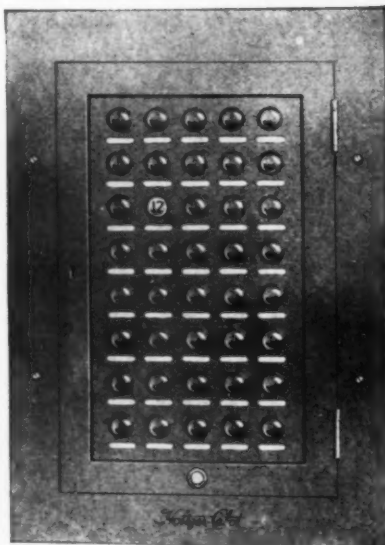


Lamp Annunciators

The Holtzer-Cabot Electric Co. has a complete line of annunciators.

Whatever the requirements are, single or double annunciators, wall or ceiling mountings, surface or flush types, with or without relays, they can be supplied.

These annunciators are supplied up to 1200 lamp capacity, with either bullseye or plain glass fronts, compartments ranging from 1/2 inch to 4 inches high.



Bank Annunciator with Bullseye Front.

The Holtzer-Cabot Electric Co.
Boston Chicago

teach the farmer how to wire his buildings, does aim to help him to know what constitutes good wiring. Because the book approaches wiring from the farmer's point of view, it will be invaluable to contractors engaging in farm wiring.

The price of the books is 50 cents each.

* * *

Recent Economic Changes

The survey of Recent Economic Changes of the President's Conference on Unemployment was begun in January, 1928, and completed in February, 1929. It was conducted by a committee of 17 of the country's most distinguished business men and financiers, with Herbert Hoover as chairman. In its later deliberations when Mr. Hoover could no longer take active part, A. W. Shaw served as acting chairman. The basic investigations of this committee were made under the auspices of the National Bureau of Economic Research with the assistance of an unprecedented number of governmental and private agencies.

The survey consists of a series of separate and highly illuminating articles or reports with substantiating data on: Consumption and the Standard of Living; Industry; Construction; Transportation; Marketing; Labor; Management; Agriculture; Price Movements and Related Industrial Changes; Money and Credit and Their Effects on Business; Foreign Markets and Foreign Credits; and National Income and Its Distribution.

The committee made a critical appraisal of the factors of stability and instability brought out in the survey, observing and describing the American Economy as a whole, and suggesting rather than developing recommendations.

While the Economic Survey cannot present a prescribed method of arriving at a basis for control in any specific industry, it can be analyzed from the viewpoint of noting which factors seem to have been successful in "maintaining equilibrium" in successful industries during the past five years.

Two volumes, 950 pages, McGraw-Hill Book Co., 370 Seventh Ave., New York, N. Y., price \$7.50.

The interior of "GALVADUCT" is protected



Approved
by the
Underwriter's
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The electro-chemical application of zinc that protects the exterior of "GALVADUCT" is only one protective feature.

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Would you like to have a Silent Partner to help you get your bills out promptly—a partner who will work hand in hand with you and help turn losses into profits—a partner who has at his fingertips each day in the year the correct price on every article used in your business? If so, why not investigate the NATIONAL ELECTRICAL RESALE PRICE SERVICE which many successful Contractors have chosen as their Silent Partner.

Pays Profits!

As one prominent Contractor-Dealer so tersely puts it: "Any Contractor who is not using your Service is missing a mighty good opportunity to increase his profits, and in the end that is what we are all working for."

Investigate—It Will Pay You!

With our Service as your Silent Partner you too can increase your profits—save time—delegate the important task of billing and quoting to someone else. Attach the coupon below to your letterhead and we will gladly send you full particulars, without obligation of course.

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Type T No. 8030

ADAPTi Standard Solid Fittings cover all solid fittings needs. Smooth interiors for easy "pull-through". Enameled or galvanized. Full line. Big stock

Can You Beat It?—NO!

THE ADAPTi LINE offers you an unbeatable combination of 3 Complete Lines—standard solid fittings, flexible-rigid, and vapor-proof. There are mighty few conduit wiring problems which these "3 Musketeers" cannot solve more efficiently and economically.

One Supply-Source—Better Discounts

The ADAPTi Co.

2996 E. 72nd St., Cleveland, Ohio

NEW YORK CITY

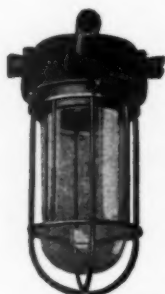
A. Stone, 112 East Twenty-Third Street

PHILADELPHIA

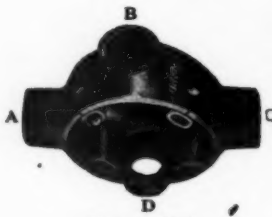
Craven Electric Sales Co., 30 Bank Street

SOUTH BOSTON

The Hastings Sales Co., 42-50 Binford St.

Type 9130
Vapor-Proof Unit

This shows one of the ADAPTi Vapor-Proof Line. A real reliable series of fittings which STAY VAPOR-PROOF even should both the lamp and the enclosing globe be broken



Type 541010

Here is a typical ADAPTiBOX fitting. Note how easily special fittings can be made up with a screwdriver right on the job. D and B are 1/2" outlets and A and C are 3/4"



A ROLL O' TAPE

Electrical flash-es gathered among the Big Wire-and-Pipe Men by

Coit A. (Duke) Smith

Field Editor, ELECTRICAL CONTRACTING

IF it's good fan weather, it's terrible for pulling in wire. What a contractor makes on fans he loses in labor on sticky wire. So, says we, he ought to be thankful he has the fans to sell.

C. C. CADWALLADER, manager of the Detroit Chapter of Electra-gists, claims the distinction of being the only chapter manager to have collected a hole-in-one this year. On June 11, Cad dropped the ball in the cup of the 145-yard 11th hole at the Lake Shore Country Club in Detroit. The there any others in his class?

THE Lighthouse Electric Co., Gary, Ind., is one of those places a fellow wants to revisit. It is roomy, well-furnished and neat. Also there is plenty of sitting room for the man who has to wait. In addition A. B. Harris and his people are unusually nice to visitors. A feature that stands out is a model kitchen installed in the store for display and demonstration purposes.

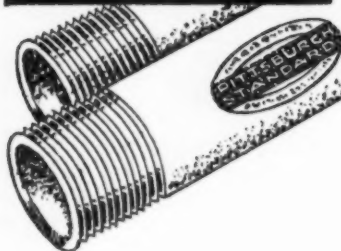
ANOTHER contractor who believes in selling the fixtures right along with his residence wiring jobs is George Warren, of Warren Electric Co., Rockford, Ill. To help this along he has constructed his own fixture display room, which is on a par with those of many medium sized jobbers.

TALK about growing up! There sure is a tremendous difference between the original place of Wilson Electric Co., Rockford, Ill., and the present establishment at 113 S. Madison street. Starting about nine years ago in a 14 by 20 ft. space, Paul Wilson today has two stories and basement, modernly equipped both as to store and shop. The latter holds a good-sized stock of wiring material and full equipment for motor service, which is one of the company's strong points. And the whole place is neat as wax.

TWO of us were hunting electrical contractors on the West Side in Chicago. On arriving at a certain listed address, we found a fruit store,



The established standard in GALVANIZED CONDUIT



ZINC coating double the Underwriters' requirements; withstands four one-minute dips of a copper sulphate test. Needs no fancy coating on top of zinc. Famous for Easy Fishing. You will like Pittsburgh Standard. Try it.

P.S. GALVANIZED SAVES TIME



ENAMELED METALS CO. Pittsburgh, Pa.

meaning that the contractor had moved. The woman looked intelligent, so I asked her if there was an electric shop nearby. "Sure, sure!" she beamed, "Coupla place over." Across the window of the place she indicated was the legend: "Electric Shoe Repairing."

R. W. DENMORE, Swords Electric Co., Rockford, Ill., furnished the following lesson from the company's contracting department. A couple came to buy their fixtures. The woman fell in love with a living-room unit costing \$75.00. "But our plans only allow us \$150.00 for all the fixtures," she stated. "In that case," the Swords salesman replied, "I'm afraid we couldn't do you any good at all, but I'm sure there has been a mistake." Then, instead of losing the order, he showed the folks what really should go into their home and the fixture order came to over \$500.00.

RECENTLY I followed Leon Granger, president of the Lake-Porter Electragists, out to a meeting of the organization, in Hammond. From the pace he set, the residents along the way must have thought Barney Oldfield was chasing Bob Burman's ghost. I learned later that all meetings of this association are opened on time and no one is excused, which is a mighty good system for any organization of electrical men to follow.

WE had one tale of a mechanic who mistook the circle indicating a plumber's stack and installed a box for a wall-bracket. Since then I heard a better one along the same line. An architect had marked H₂O on the plans, meaning a water pipe. The letters were somewhat dim and the mechanic more so, with the result that he took it to be something about horsepower and put in pipe for a motor lead.

MESSRS. Uhl and Slauson, partners in the Uhl-Slauson Electric Co., Chicago engineer-contractors, are necessarily separated a great deal during the rush of business. They make up for this by dashing north for a few fish whenever there is a double holiday or a sunshiny week-end. As Albert Uhl is noted for precision and accuracy in all things, you can depend on any fish measurements given out by him, even to sixty-fourths of an inch.

I SUGGEST a Carnegie Medal or some similar decoration for heroism for the Maple City Electric Co., Monmouth, Ill. Our friends Ward and Wise of that company actually invited competition on some local jobs which they could have had alone. They did this to show the owners that right prices, not low prices, go hand in hand with good work. With no two bids alike, yet somewhere near each other, the customers soon see that everyone is playing fair.

OUR ENGINEERS have paved the way for you .

We have cataloged every one of the several hundred floodlighting installations, including new building illumination which is proving so increasingly popular in cities of all sizes . . .

All we ask is that you write us today for the details and we will show you how to land the business.

YOUR TERRITORY is Ripe for This New and Profitable Specialization

—and you can be the floodlighting specialist . . . "National" Floodlight Projectors deliver maximum light—using fewer projectors and less current . . . They are light in weight, yet designed for heavy duty service . . . weather-proof and dustproof. Their simplicity pro-

vides fast and profitable installation.

Just send us a rough sketch and we will make recommendations. Write us today for catalog of the complete line and all the money-getting facts.



Type S J 204

NATIONAL APPLIANCE COMPANY

JACKSON

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DIVISION OF REYNOLDS SPRING CO.



"I never overlook a bet!"

Writes a W. B. B.

"since I have been getting the WIREMOLD Business Builder. It is a great help to me in getting business because it keeps me on my toes—and points out ways and means that I might have overlooked."

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Send in your name now for mailing list. Also get latest Wiremold Catalogue and literature.

KEEP UP WITH THE WIREMOLD LINE—CONSTANT IMPROVEMENTS—NO RADICAL CHANGES.

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Twenty-Six Million
(and more)

P A I N E
Spring Wing Toggle Bolts
Now In Use—
They must be good!

Merit alone put Paine Spring Toggles highest in the opinion of the electrical contractors of half the world. If they can save time, money and trouble while giving their customers a better job, you can do the same. Get a Paine Toggle Bolt and see for yourself. Mail the coupon.

Stocked by jobbers everywhere.



The PAINE Company

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Coupon Brings Sample

The Paine Co., 2947 Carroll Ave., Chicago, Ill.
Please send me a sample Paine Spring Wing Toggle Bolt.

Name

Address

City.....State.....

Switches Before Controllers

(Continued from page 26)

or less, the switch shall be capable of opening the circuit under load, but for loads of more than 50 H. P. a type of disconnecting switch is permitted that is intended to disconnect the current supply but not open the circuit under load. The following are exceptions to the above:

- (1) Where a number of motors are used on a single machine or apparatus to drive the machine, such as cranes, hoists, metal and wood-working machines, a single disconnecting switch that disconnects the current from the circuit that supplies the machine may be used.
- (2) A single circuit switch will serve the purpose where groups of small motors are connected to one set of fuses or a single circuit breaker. It is quite evident that the switch may be omitted in the case of small motors that are used on 15 amp. circuits where the wattage does not exceed 1320 for the entire circuit.
- (3) Where there are a number of motors in a single room (not spaced all over a factory), a single switch may be used for the feeder that supplies the motors in the room.
- (4) Motors that are controlled by a knife or snap switch need not have other switches ahead of the knife or snap switch. In this case, a knife switch also means an enclosed switch. Rule 1003 (d) also states that the plug connector may be used in lieu of the disconnecting switch for portable motors.

Where the inspection department permits in the case of a small motor fused with plug fuses, the plug fuses may be used as the disconnecting means.

For motors that are controlled by knife (enclosed), and snap switches, the disconnecting means may be as far away as the distribution center. This type of motor is one that uses a separate fuse and switch for each motor, and is not

Rubber Insulated Wires and Cables

Insulating Tapes and Splicing Compounds

Raven
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Grimshaw
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Tapes



NEW YORK INSULATED WIRE CO.

Main Office
114 Liberty Street,
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Factory:
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New Conduit Type Cable Support



A Simple Two Piece Cable Support for Vertical Runs.

Can furnish these in split type if wanted.

A Compact End Fitting



One that has a canvas bakelite insert made to take one to nine wires.

Bakelite Insulated Bushing



An insulated bushing made to prevent serious and disastrous grounds.

O. Z. CABLE SUPPORT CO., INC.
45 Bergen St. Brooklyn, N. Y.

Send us your latest bulletin with prices

Name

Address

to be confused with small motors on 15 amp. branch circuits.

Rule 1003 (e) describes a disconnecting means, and states that it shall indicate when the current is "on and off." Also, that the disconnecting switch shall open all ungrounded conductors. If the disconnecting switch has one pole in the grounded conductor, it shall open all conductors of the circuit simultaneously. The disconnecting switch shall be at least 15 per cent heavier than the name plate rating of the motor. It shall be located within sight of the controller and arranged so that it may be locked in the open position, so that a person working on the motor or starter may protect himself from the circuit becoming alive while he is at work.

George Welman.

* * *

Prominent Springfield Contractor Dies

John Collins of the Collins Electric Co., Springfield, Mass., died recently in that city. He was well known by a large number of electrical contractors and was very active in the electrical contractors' association work. The Springfield Electrical Contractors Association sent a hand engraved memorial to his widow in memory of his wholehearted activity in the industry.



TEN LITTLE RED SEAL HOMES, ALL IN A ROW:—Gerritt Dekker, of Dekker Electric Co., Chicago, is seen standing in front of a whole block of bungalows, all ten of which he wired on the Red Seal Plan. He is strong for better wiring, and particularly adequate wiring for future needs.



in the Benco Socket

- 1—Metal Protection—an armor against wear and weather.
- 2—Highly Insulated with Porcelain—covered by the metal armor.
- 3—Easy to Wire—safe and permanent.
- 4—Threaded for Quick and Easy Assembly—speeds up lamp and reflector cleaning.
- 5—Thoroughly Weather-proof.
- 6—Lamps cannot shake loose under vibration.
- 7—Of good appearance—in copper, brass or aluminum.
- 8—Keyless or Pull-Chain Control—chain comes straight down inside the socket and reflector.
- 9—Long Service—the best quality always proves to be the cheapest.
- 10—Made by Benjamin and therefore a Good Product.

Our nearest office will gladly furnish full information on Benco Sockets and Benco Threaded Accessories.

Benjamin Electric Mfg. Co.

General Offices and Factory
DES PLAINES, ILL.
(Chicago Suburb)

New York

Chicago

San Francisco

BENJAMIN
TRADE MARK

Manufacturers News

A department for the announcement of activities of manufacturers that are of interest to contractors, such as changes in executive personnel, branch offices, new products, etc.

Beardslee and Williamson Combine

Announcement has been made of the consolidation of the Beardslee Chandelier Mfg. Co. and R. Williamson & Co., both of Chicago. The organization will be known as the Beardslee Chandelier Mfg. Co. and will continue to manufacture the complete lighting fixture lines formerly marketed by the separate companies.

The new combination forms, it is claimed, the largest single exclusive manufacturer of lighting equipment in the country.

* * *

Becker a Turner Brass Official

J. Walter Becker has been elected vice-president and a director of the Turner Brass Works, Sycamore, Ill. He takes this position in addition to his duties with the Ideal Commutator Dresser Co. of Sycamore. The Turner Brass Works manufacture liquid fuel heating devices, name plates and brass products, specializing in blow torches, fire pots and brazers. Mr. Becker states that the company will soon have ready for announcement a new product which will, it is expected, revolutionize the fire pot business.

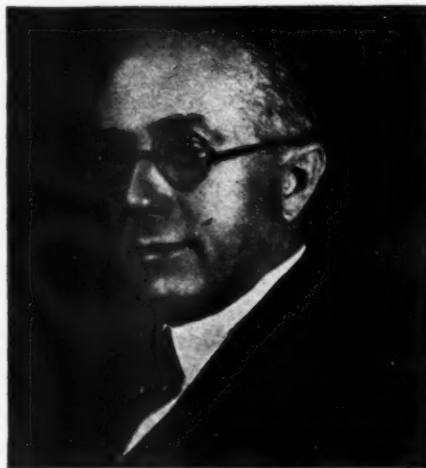
* * *

Merrick Elected Westinghouse President

F. A. Merrick was elected president of the Westinghouse Electric & Mfg. Co., East Pittsburgh, Pa., at the company's recent board of director's meeting. E. M. Herr, who resigned from that position to go on an extended vacation, was elected vice-chairman.

Mr. Merrick became associated with the Westinghouse company when that company took over the

Steel Motors Co., where he was employed as manager and chief engineer, and where he was responsible for many important electrical inventions. His first experience with Westinghouse was as superintendent of the Canadian branch, and later as its manager and vice-president. During the world war he was assigned to the New England Westinghouse Co. to superintend the manufacture of war material. Although it was necessary to reorganize and re-equip this factory for this purpose, Mr. Merrick completed an order for 60,000 Browning machine guns within 11



F. A. Merrick

months after operations were begun. This achievement has been regarded in the industrial field as being without parallel.

Mr. Merrick will be located at the company's Pittsburgh headquarters.

* * *

New General Cable Officials

At a recent meeting of the board of directors of the General Cable Corp., New York City, J. W. Marsh resigned as chairman of the board. He is succeeded by Wal-

ter Robbins, formerly president, while H. T. Dyett has been elected president. Mr. Marsh becomes vice-chairman of the board.

* * *

Van Dorn Appointments

J. M. (Jack) Beggs has been placed in charge of the advertising department of the Van Dorn Electric Tool Co., Cleveland. Mr. Beggs has been transferred from the company's sales department.

R. W. Procter, who comes to Van Dorn from the Black & Decker Mfg. Co., assumes the duties of general sales manager, succeeding Lyman H. Bellows, who has resigned.

* * *

Triangle Announces Line of Boxes

The Triangle Conduit Co., Brooklyn, N. Y., has announced a complete new line of switch and outlet boxes and accessories. The switch boxes include those for loom, flexible and rigid metallic conduit. These boxes may be had in the plain type, with improved extended ears, with improved extended ears and lath supports, and with mounting brackets and lath supports. The mounting bracket has a new feature for keying plaster in a secure and permanent manner. These switch boxes also include a specially designed type for mounting receptacles, on which the ears are fastened to the long side of the box, the box being placed horizontally, in the proper position for mounting a receptacle when the ears are nailed direct to the studs. The ears are set at a proper height to bring the edges of the box flush with the working surface, thus doing away with all building-up. Another feature in the line of switch boxes is the Triangle adjustable wall bracket



A BIG MONEY SAVER

Eliminates triple handling—unwinding—measuring and rewinding wire, thus saving time and money.

Manually operated—reels wire into neat coil, automatically counting and registering number of feet.

Strongly built of heavy selected materials so as to last a lifetime.

It Pays for Itself

Send for bulletin.
Write us or your jobber.



**Minneapolis Electric
and Construction Co.**

80 S. 12th St.
Minneapolis Minn.

Beating Competition with Brains

Competition is tough in the electrical contracting business these days; and every day it gets worse. Successful contractors have found they can beat fly-by-night competition best by using their brains, and by educating their responsible employees. You can help your head men to keep abreast of the times and save you money by sending each his own copy of **ELECTRICAL CONTRACTING**.

box for old or new work.

The outlet boxes include all standard types of $3\frac{1}{4}$ in. and 4 in. octagon boxes and covers, and 4 in. and $4\frac{1}{4}$ in. square boxes and covers. Also two types of cast cable boxes are furnished.

Among other equipment included in the new line are set up boxes, which are fully adjustable for position on the bar, octagon shaped concrete boxes and plates, the flat sides of which are wide enough to give good bearings for locknuts and bushings, and gang switch boxes and covers.

The line also includes tandem switch boxes, which are furnished in two, three and four gangs, with knockouts for loom, BX, $\frac{1}{2}$ in. or $\frac{3}{4}$ in. conduit.

Utility boxes and covers of the 4 in. and $3\frac{3}{4}$ in. size are offered. The fittings included in this line are locknuts and bushings ranging in size from $\frac{3}{8}$ in. to 6 in., no-bolt fixture studs, hickey style fixture studs, squeeze box connectors, set screw box connectors, and Triangle fish line. The set screw box connectors are now furnished with the improved Triangle locknut.

The Triangle Conduit Co. now has under way a number of other improved devices, which it expects to announce in the near future.

* * *

New Sales Manager for Thomas & Betts

N. J. MacDonald has been made sales manager of the Thomas & Betts Co., New York City. Mr. MacDonald has been with the company for 9 years in the various capacities of salesman, assistant sales manager and advertising manager.

* * *

General Electric Sales Report

General Electric Company sales billed for the first six months of 1929, announced by President Gerard Swope, amounted to \$194,353,307.99 compared with \$158,015,221.41 for the corresponding period last year, an increase of 23 per cent.

* * *

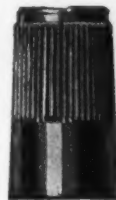
The Indiana Rubber & Insulated Wire Co., Jonesboro, Ind., has compiled a new catalog which, in

Trade Mark

SRK

A1 WIRE

Connectors



THE BETTER KIND

A perfect joint every time plus simplicity and dependability.

A joint which is safer, stronger and better mechanically and electrically. SRK's embody everything necessary to make such joints. There is nothing more to ask for—and the job is done in a Jiffy. 1 size for combinations of No. 14, No. 16 and No. 18, solid or stranded, up to 4 No. 14 and 2 No. 18, or equivalent.

MILLIONS IN USE

Approved by Underwriters Laboratories
and Factory Mutual Laboratories

Samples upon request

Patent No. 1635293; Others Pending

Manufactured by

JIFFY WIRE CONNECTOR CO.

Hackensack, New Jersey

General Sales Office

G. Denn. Montgomery, Jr.
522 Broadway, New York City
Phone Canal 7533

"DETROIT" RUBBER COVERED WIRES

(Reg. U. S. Pat. Office.)

**RUBBER INSULATED
WIRES AND CABLES**

LAMP CORDS

AUTOMOBILE WIRES

PARKWAY CABLES

**LEAD ENCASED
RUBBER INSULATED
WIRES AND CABLES**

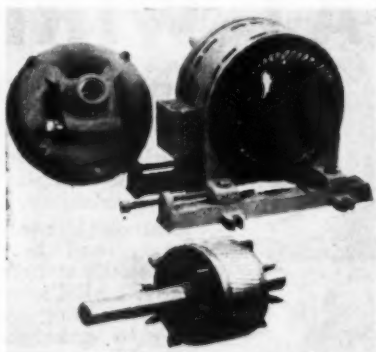
**UNIDUCT ARMORED
WIRES**

**FLEXIBLE METALLIC
CONDUIT**

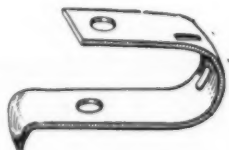
**Detroit Insulated Wire Company
Detroit, Mich.**

Division of General Cable Corporation

New Electrical Products



The Howell Electric Motors Co., Howell, Mich., has brought out a new single phase motor without brushes, commutators, internal switching devices or wire wound rotor. The only auxiliary equipment used in the operation is the starting unit which contains starting condensers and an automatic contactor for disconnecting the condensers from the circuit as the motor comes up to full speed. The absence of sliding contacts eliminates sparking and radio reception interference. The motor is reversible at full speed.

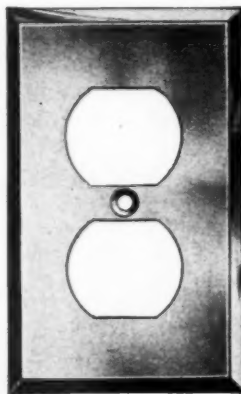


A clip for use with BX and non-metallic sheathed cable is a new device being offered by the Midwest Metal Products Co., Muncie, Ind. The indents conform to the convolutions in the BX to securely lock the cable. The spur is designed to firmly anchor the clip.

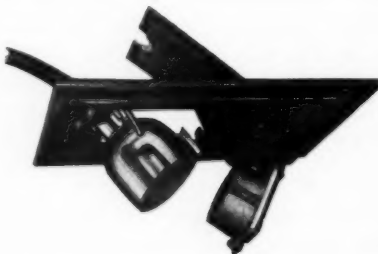
A new connector is announced by the Lexington Electric Products Co., Inc., Newark, N. J., which is designed to handle a total of 8 wires at 30 amp. each and has plugs and receptacle spaced for 250 volts. The illustrated model is adapted for stage receptacle requirements. This connector is mounted to a cast iron frame. Special features claimed for it are a latch which locks the plug in place and which will not fall behind the raised portion on the cap of the plug holder, holding the door open, unless the holder is inserted so the plugs properly contact with their receptacles. The plugs and receptacles fit loosely in bakelite holders. Three plugs are placed unsymmetrically around the aluminum plug and receptacle holders permitting the plug to enter the receptacle only one way.



The type ADA floodlight, a product of the Crouse-Hinds Co., Syracuse, N. Y., is designed for universal service. The light distribution may be varied from a narrow beam spotlight to a wide angle short range floodlight. The beam may be made either round or elliptical. Colors may be obtained with heat-resisting lenses. The housing is of cast aluminum alloy and is non-corrosive. The unit is also non-ventilated, dust-tight and weatherproof.



The Chicago Steel Tank Co., 6400 W. 66th St., Chicago, has placed on the market a line of alloy flush switch and receptacle plates, finished in standard brass lacquer and in a wide variety of colors. The plates are made in toggle, push-button, single receptacle and duplex receptacle styles from one gang to six. They are also furnished in any combination up to six gang in both brass and color.



The Benjamin Vapor-Proof Projectolite, manufactured by the Benjamin Electric Mfg. Co., Des Plaines, Ill., is a fixture designed for the lighting of horizontal and vertical surfaces from an oblique angle, and is recommended by the manufacturer for locations requiring an even illumination over an entire surface. The reflector bowl is of chromium plated copper onto which is swedged a one-piece metal neck. There are no openings in top of the neck to allow dust or vapor seepage, and all wiring is enclosed with leads coming directly from conduit stem through an adjustable, gasket-sealed ball fitting. The unit is sealed at the bottom by a heat-resisting moulded glass lens and double felt gasket held in place by a steel band.



The Belden Mfg. Co., Chicago, announces a Thru-the-Rug wiring set for table call bells, that brings a pendent type push button switch convenient to the hand of the hostess, by means of a concealed wiring system. The push button is fastened to the table. A Thru-the-Rug connector is used to carry the circuit through the rug. This device consists of a thin bakelite base supporting fine pins which pass through the rug. A cap that fits over these pins provides an outlet for the push button extension cord. The connector is attached to the floor plate with a flexible cord.

ESTIMATOR'S TIME SAVER

Every estimator's tool kit should have
 1. Rotometer ..\$4.50
 2. Tallying Machine ...\$4.50
 for taking off quantities of material quickly and accurately. Used by leading estimators. GUARANTEED to satisfy you or your money back.
 Send \$4.50 each for Rotometer or Tally Machine, postpaid.

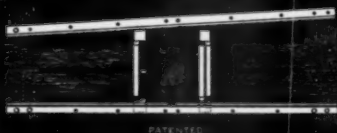
The Peerless Blue Print Co.

341-347 Fifth Ave.,
 New York City

Keep Up-to-Date

By reading these pages you will acquaint yourself with what is newest and best in electrical supplies and equipment. When communicating with an advertiser mention

Electrical Contracting

KRUSE

Switch Box Supporting Strips with or without Lath Holders

16 1/2-18 1/2-20 1/2-22 1/2-24 1/2-26 1/2-In. Lengths

Used by Contractors everywhere. A leader for ten years. Stocked by all leading jobbers. Millions of sets used yearly.

WE ALSO MAKE

Kruse Bar and Old Work Hangers
 Peerless Type A Old Work Hangers
 Non-Metallic Sheathed Cable Straps
 Fitz-M-All Outlet Box Hangers
 "Ready" Service Fittings

WRITE

For Prices and Literature

Mid-West Metal Products Co.
 MUNCIE, INDIANA

addition to illustrating, describing and giving specifications on "Paranite" products, contains much valuable information with regard to wiring data for motors, standard symbols for wiring plans, approximate equivalent cross sections of solid and stranded wires, carrying capacities of insulated wires and cables, etc. One page is devoted to a construction chart for flexible cords, fixture wire and heater cords.

* * *

Bull Dog Announces Safety Policy

Bull Dog Electric Products Company, Detroit, Mich., announces to the electrical industry and the general public the following policy in relation to the manufacture of its products:

Effective at once, we shall discontinue advertising, offering for sale and manufacturing all Live-Face Electric Products not recognized and approved by the Safety Recommendations and Rules as published by the Department of Commerce, U. S. Bureau of Standards, in accordance with the procedure of the American Engineering Standards Committee.

In line with this policy, we will no longer manufacture the following:

1. Live Face or Open Face Lighting Panelboards.
2. Lighting Panelboards having Main Fuses (not switched) or fusible only sub-feeds on the Panels.
3. Feeder or Distributing Panelboards having fuses only in the branches (not switched).

As heretofore, we shall continue to devote our entire energies and resources to the increased use of electricity through promotion of safety electrical products for the protection of life and property.

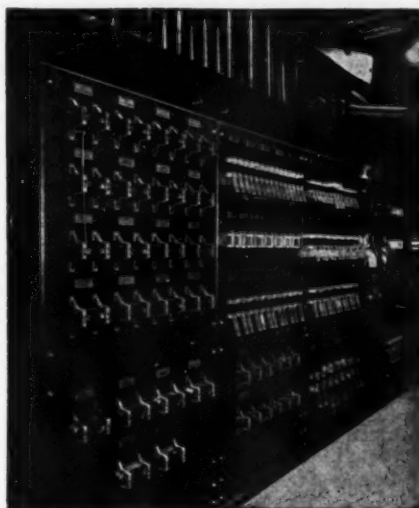
* * *

Increases Distribution Service

A nation wide distribution and engineering service has been announced by the Diamond Electrical Mfg. Co., Los Angeles, Calif., with the completion of negotiations with the Union Electrical Mfg. Co., Milwaukee, Wis., for the distribution of Diamond E products east of the Mississippi.

For the provinces of Quebec and Ontario, Canada, the E. W. Playford Co., Montreal, will distribute Diamond E products.

Additional distributors recently appointed are: Mora Electric Co., 7 Calle Soda, Manila, P. I.; Robinson Sales Co., 617 4th Ave., Seattle, Wash.; Joseph Paulson, 218 Commonwealth Bldg., Portland,

**BERTHOLD**
SWITCH and PANEL
BOARDS for
LIGHT and POWER

Berthold "Selectrolite" System of Lighting Control for theatres, auditoriums, lodgehalls, etc.

GUS BERTHOLD ELECTRIC CO.
 555 W. MONROE ST. CHICAGO, ILL.

Steel
 Cabinets



Stage
 Equipment

**You Can Underbid
 and Make More Profit**

By Using

IDEAL Universal
Wire Connectors

**Solderless!
 Tapeless!**

They do a 10 minute job in 1 minute and make better mechanical and electrical joints.

One size fits all common wiring joints, motor taps, etc. Special large size for industrial use. Special small size for fixture wiring, joints in shallow canopies and appliances.



Cross Section View

Approved by Underwriters' Laboratories

MAIL COUPON TODAY

Ideal Commutator Dresser Co.,
 1041 Park Ave., Sycamore, Ill.

☐ Please send me one trial carton of 100 "Standard Universal" Connectors at \$3.35.

☐ Please send a free sample connector.

Name

Address

City..... State.....

Your Jobber

New Electrical Products



A feature of the new "Hegemite" plate No. 3974 just marketed by the Hart & Hegeman Division of the Arrow-Hart & Hegeman Electric Co., is the switch and receptacle combination. The receptacle is designed to take the attachment plug of any electric appliance, while the switch controls the lights. It is finished in brown with a border and vertical-ribbed surface.

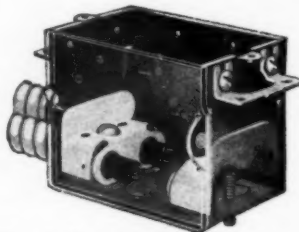
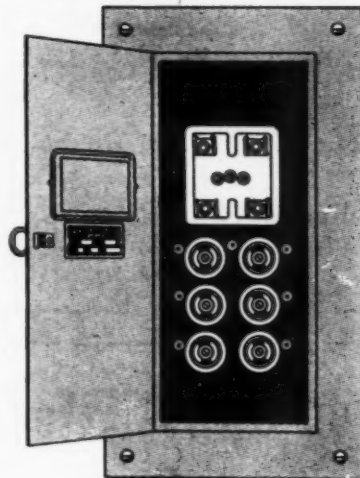


The Bryant Electric Co., Bridgeport, Conn., is marketing the KeNex receptacle and plug. The receptacle is designed to fit any standard switch or convenience outlet box. Three wiring methods are possible: The fixture may be supported by means of a stud through the back; by use of two screws; or with two flat head iron screws in the bridge strap, which are then locked into position with nuts, and over which two straps are slotted to slide.



In the future the Royal Electric Co., Chelsea, Mass., will characterize its crystal fuses of an amperage of 15 or under by a hexagon head. This new design of the head makes it possible for the troubleman or contractor to tell instantly under all circumstances the condition of a circuit, whether over or under fused. The hexagon head also permits a firm grip on the fuse.

A line of 60 ampere range circuit cabinets, with and without plug fuse distribution, have been announced by the Wadsworth Electric Mfg. Co., Covington, Ky. These are of the flush mounted type and are equipped with removable dead front. The cabinets are furnished with two bar hanger supports with tapped holes to take screws through the angle piece on the cabinet. They are designed to span 16 in. studding. The cabinet can be reversed end for end on these supports, and also with respect to trim. The trim and dead front are entirely separate. Each circuit may be tested independently through insulated test holes without removing the dead front.



The Jefferson Electric Co., 1500 S. Laflin St., Chicago, is offering its new Gem X-5 sectional switch box with a new and improved bushed clamp, the No. 7B. This clamp is provided with bushed holes designed to protect the insulation of the wire and to eliminate the need of extra brass ferrules when metallic cable is used. Another feature of the clamp is the upright flange which closes the hole around the incoming cable. It is suitable for use with non-metallic sheathed cable, armored cable and loom.



The No. 8000 utility outlet and the No. 1700 floor box are additions to the line of the Thomas & Betts Co., New York City. The utility outlet is a small standard outlet 2 1/4 in. high, 1 3/8 in. body diameter and 2 1/2 in. plate. It consists of a one piece round galvanized box into which the insulating jacket fits, a bushed cable connector which snaps into spring yoke, a standard convenience outlet and a round flanged brass plate with two screws.



A new development of the Westinghouse Electric & Mfg. Co., East Pittsburgh, Pa., is the type NAB Nofuz panelboard for the control of branch circuits. Constructed without switches and fuses, this panelboard is equipped with an automatic circuit-breaker, operating upon the principle of deionization, and replacing the conventional toggle switch and fuse. The circuit breaker consists of a rugged toggle mechanism actuating the moving contacts and designed to withstand short circuits in excess of actual requirements. In the case of abnormal overloads on the branch circuits the breaker opens automatically and can be immediately reclosed if the overload condition is not sustained. The panelboard is built with the solid neutral and is available in capacities of from 2 to 64 circuits in multiples of two circuits.

Concrete Inserts Save Time in Conduit Installation



Pound them in the form; the concrete holds them solid; hang the pipe below.

Send for Bulletin or Sample

Commonwealth Electric Co.
417 Broadway, St. Paul, Minn.

General Electric Supply Corp.

**EDISON MAZDA LAMPS
ELECTRICAL AND
RADIO SUPPLIES**

**BALTIMORE RICHMOND
NORFOLK CHARLOTTE**

Distributors for General Electric Company, Radio Corporation of America and other large and reputable manufacturers.

E-Z WIRE STRIPPER

A HANDY TOOL



This inexpensive tool strips wire of 10 to 20 gauge 20 times faster than usual methods.

A MONEY BACK GUARANTEE with every E-Z Wire Stripper. Send for yours now.

\$5⁰⁰ LIST

PYRAMID PRODUCTS CO.

2313 South State Street

Chicago, Ill.



THE RAWLPLUG CO., INC.

66 West Broadway,
New York City

Branches in 25 Cities
Write for Bulletin B-201

Ore.; O. H. Davidson Equipment Co., 130 W. 14th Ave., Denver, Colo., and Farr Electric Service, 228 S. W. Temple St., Salt Lake City, Utah.

* * *

The General Electric Co. has issued a catalog entitled "Motor Drive for Metal Working Machinery."

* * *

The Benjamin Electric Mfg. Co., Desplains, Ill., is now distributing supplement No. 1 to catalog 24. This supplement contains descriptions, listings, illustrations and installation data on the company's new sign reflector, Glassteel diffuser, Sturdex fixtures, vapor-proof Projectolite and several others of its new products.

* * *

Folder 5188 illustrating and describing the construction, protective devices and interior cooling system of its D. C. totally enclosed fan-cooled type SK motor is a new publication of the Westinghouse Electric & Mfg. Co. "Power at the Touch of a Button," describing linestarters and linestart motors is also ready for distribution.

* * *

The Wagner Electric Corp., St. Louis, Mo., announces the addition of W. H. Kretz to its transformer sales division. Mr. Kretz, who was formerly with the Public Service Co., of Oklahoma, will travel the southwest.

* * *

F. L. Reynolds has been appointed district representative for the Allen-Bradley Co., Milwaukee, Wis. He will cover western Michigan and will have headquarters at 4143 Ellsworth Ave., Grand Rapids, Mich.

* * *

Harvey Hubbell, Inc., Bridgeport, Conn., has issued a new catalog of electrical specialties. This catalog, No. 19, illustrates many new and radically changed devices.

* * *

The Chicago office, warehouse and showroom of Pass & Seymour, Inc., Syracuse, N. Y., have been moved to 605 W. Washington St.

HyKon BORING DEVICE

with

New One-Piece Self-Centering Chuck



adjustable for boring deep or shallow holes. Thumb screw holds it . . . Simple and easy to operate, making old house wiring jobs more profitable than ever . . . The new one-piece self-centering chuck

Eliminates Set Screws

formerly necessary to center the bit . . . Notch in the end of shaft permits operator to hold spindle and release chuck without the use of a wrench . . . Head may be quickly detached from standard and put on any attachment. Order today from your jobber or write us direct, giving us his name.

We also are manufacturers of the HyKon Reel for all types of wiring jobs.

The HYKON Mfg. Co.
Alliance Ohio

The Jiffy Line

Jiffy Tools Reduce Costs!

We guarantee your satisfaction. Order any tool illustrated on the margin, on approval. If YOU are not satisfied return the material at our expense.



Pipe Bender



Nipple Chuck



Box Cutter

A Bulletin describing the complete line in detail will be mailed upon request. Fill in the coupon below or send in your order ON APPROVAL.

ESTABLISHED 1915

Paul W. Koch & Company
25 So. Wells St., Chicago

☐ Send information regarding free trial.
☐ Send the "Jiffy Line" Bulletin.

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Firm.....

Street.....

Address.....

7-10-29

SINCE 1895



MORE NEW OUTLET BOX DEVICES

WEBER OUTLET BOX SWITCHES

Rating $\left\{ \begin{array}{l} 5 \text{ Amp. 125 V.} \\ 3 \text{ Amp. 250 V.} \end{array} \right.$

Approved by Under-
writers' Laboratories,
February 24, 1928

Cat.
No.

2646 S.P., 3 $\frac{1}{4}$ inch
2647 S.P., 4 inch
2648 3-Pt., 3 $\frac{1}{4}$ inch
2649 3-Pt., 4 inch

A line of "dependable"
toggle switches perma-
nently attached to iron
box covers. Binding
screw terminals are ex-
posed in the rear, as in
sign receptacles. Covers
may be black, galvanized
or brass lacquer.

Sold Through Weber
distributors.
Send for Sample.

HENRY D. SEARS

General Sales Agent

80 BOYLSTON STREET
BOSTON, MASSACHUSETTS



WEBER DEPENDABLE
WIRING DEVICES

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